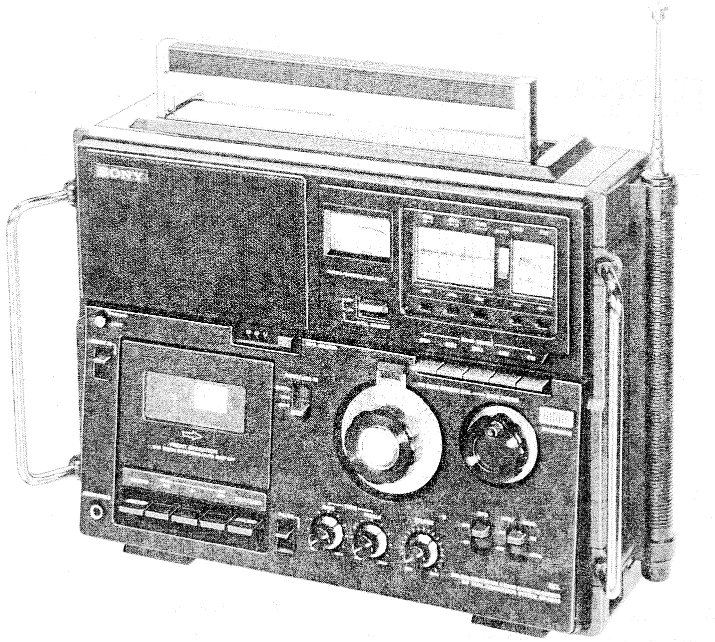
CF-950S

E Model
UK Model
AEP Model



SW/FM/MW CASSETTE-CORDER

SPECIFICATIONS

GENERAL

Power Requirements:	110, 120, 220, 240 V ac, 50/60 Hz (E, AEP Model) 240 V ac, 50 Hz (UK Model) 6 V dc Battery size – D, 4 pcs (IEC designation R20)
Power Consumption:	14 W ac (E, AEP Model) 10 W ac (UK Model)
Speaker:	Approx. 15 x 10 cm (6 x 4 inches)
Dimensions:	Approx. 432 (w) x 305 (h) x 148 (d) mm 17 (w) x 12 (h) x 5⅞ (d) inches including projecting parts and controls
Weight:	Approx. 5.6 kg, 12 lb 6 oz, with batteries

RADIO SECTION

Antennas:	FM/SW:	telescopic antenna	
	MW:	ferrite-rod antenna	
	FM/SW/MW:	external antenna terminals	
Frequency Ranges:	FM:	87.5 – 108 MHz	(3.43 – 2.78 m)
	MW:	530 – 1,605 kHz	(566 – 187 m)
	SW1:	1.6 – 4.0 MHz	(188 – 75 m)
	SW2:	4.0 – 10.0 MHz	(75 – 30 m)
	SW3:	11.7 – 22.0 MHz	(25.6 – 13.6 m)

TAPE RECORDER SECTION

Track:	2-track monaural
Fast Forward Rewind Time:	Approx. 1 minutes 50 seconds with Sony cassette C-60
Frequency Response:	50 – 10,000 Hz
Battery Life:	In continuous recording with built-in microphone: Approx. 13 hours with Sony long-life battery size – D
Inputs:	MIC (mini jack) Maximum sensitivity: 0.2 mV (–72 dB) Impedance: for low-impedance microphone LINE IN (mini jack) Sensitivity: 0.1 V (–17 dB) Impedance: 680 kΩ
Outputs:	EARPHONE (mini jack) 8 Ω earphone or load impedance 10 kΩ or higher HEADPHONES (stereo binaural jack) for 8 Ω impedance headphones MPX OUT (mini jack)
Other Jack:	Remote control jack

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SONY®

SERVICE MANUAL

MODEL IDENTIFICATION

UK model

SONY®

CASSETTE-CORDER 5 BANDS **CF-950S**

FREQ. RANGE: FM 87.5–108 MHz
MW 530–1605 kHz
SW1 1.6–4.0 MHz
SW2 4.0–10.0 MHz
SW3 11.7–220 MHz
AC: 240 V ~ 50 Hz 10 W
DC: 6 V = FLASHLIGHT BATT
SIZE D x 4 OR EQUIV
MADE IN JAPAN

AEP, E model

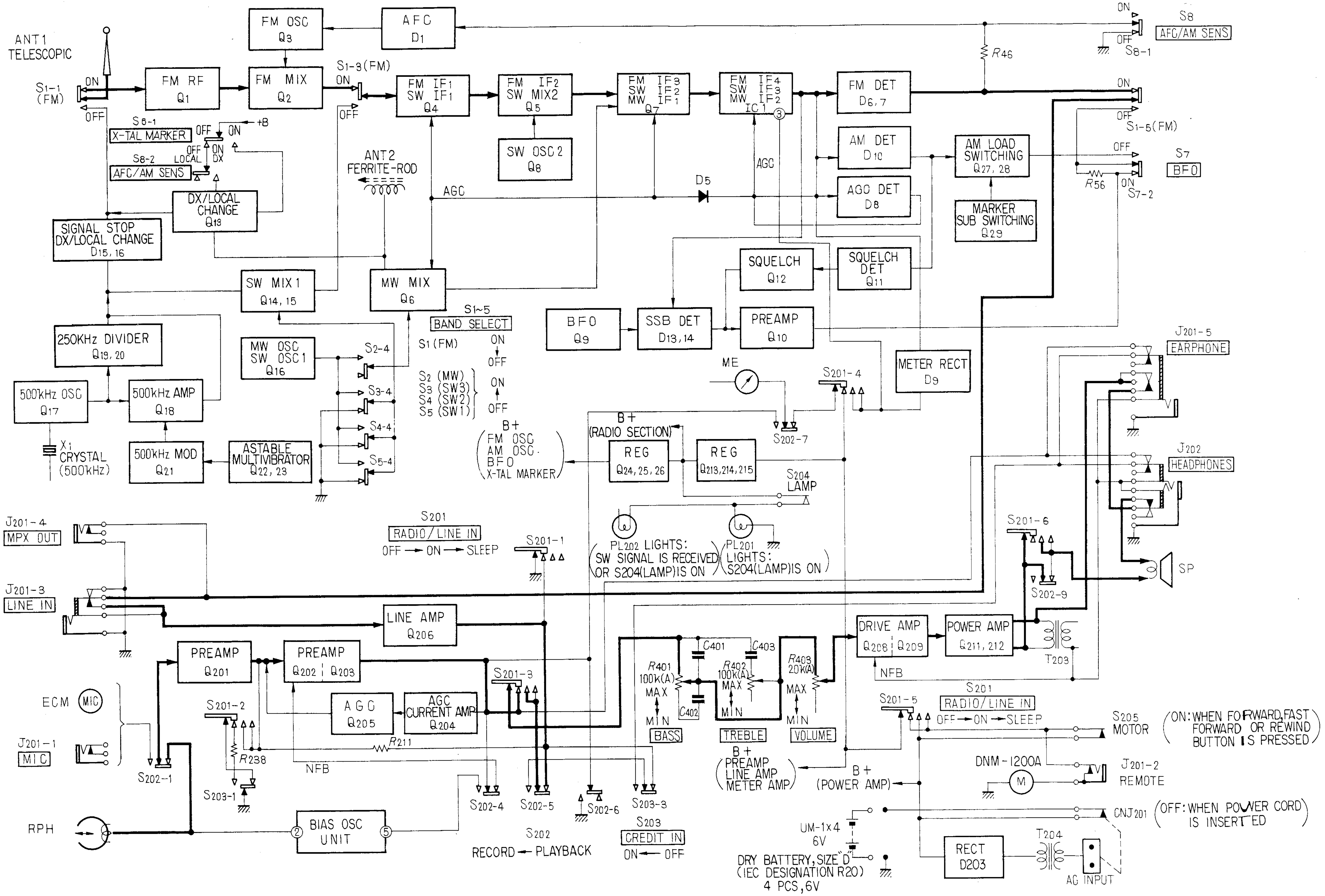
SONY®

CASSETTE-CORDER 5 BANDS **CF-950S**

FREQ. RANGE: FM 87.5–108 MHz
MW 530–1605 kHz
SW1 1.6–4.0 MHz
SW2 4.0–10.0 MHz
SW3 11.7–22.0 MHz
AC: 110, 120, 220, 240 V ~
50/60 Hz 14 W
DC: 6 V = FLASHLIGHT BATT
SIZE D x 4 OR EQUIV
MADE IN JAPAN

SECTION 1
OUTLINE

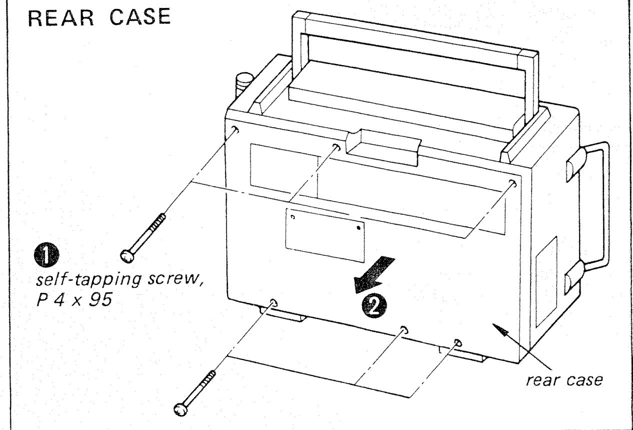
1-1. BLOCK DIAGRAM


ANT1 TELESCOPIC
S1-1 (FM)
ON
OFF
FM RF Q1
FM OSC Q3
AFC D1
FM MIX Q2
S1-3(FM)
FM IF1 SW IF1 Q4
FM IF2 SW MIX2 Q5
FM IF3 SW IF2 MW IF1 Q7
FM IF4 SW IF3 MW IF2 IC1
FM DET D6,7
R46
S8 AFC/AM SENS
S8-1
S1-5(FM)
S7 BFO
S7-2
R56
S6-1 X-TAL MARKER
S8-2 AFC/AM SENS
LOCAL DX
+B
DX/LOCAL CHANGE Q13
SIGNAL STOP DX/LOCAL CHANGE D15,16
SW OSC2 Q8
ANT2 FERRITE-ROD
AGC
D5
AM DET D10
AGC DET D8
AM LOAD SWITCHING Q27,28
MARKER SUB SWITCHING Q29
SW MIX1 Q14,15
MW MIX Q6
SQUELCH Q12
SQUELCH DET Q11
BFO Q9
SSB DET D13,14
PREAMP Q10
METER RECT D9
250KHz DIVIDER Q19,20
500kHz OSC Q17
500kHz AMP Q18
X1 CRYSTAL (500kHz)
500kHz MOD Q21
ASTABLE MULTIVIBRATOR Q22,23
MW OSC SW OSC1 Q16
S2-4
S3-4
S4-4
S5-4
S1~5 BAND SELECT
S1 (FM) ON OFF
S2 (MW) S3 (SW3) S4 (SW2) S5 (SW1) ON OFF
B+ FM OSC AM OSC BFO X-TAL MARKER
B+ (RADIO SECTION)
REG Q24,25,26
REG Q213,214,215
ME
S201-4
S202-7
J201-5 EARPHONE
J202 HEADPHONES
S204 LAMP
PL202 LIGHTS: SW SIGNAL IS RECEIVED OR S204(LAMP) IS ON
PL201 LIGHTS: S204(LAMP) IS ON
S201 RADIO/LINE IN OFF → ON → SLEEP
S201-1
S201-6
S202-9
SP
J201-4 MPX OUT
J201-3 LINE IN
LINE AMP Q206
PREAMP Q201
PREAMP Q202 Q203
AGC Q205
AGC CURRENT AMP Q204
R211
S201-2
R238
S201-3
S203-1
NFB
ECM MIC
J201-1 MIC
S202-1
RPH
BIAS OSC UNIT
S202-4
S202-5
S202-6
S203-3
S202 RECORD ← PLAYBACK
S203 CREDIT IN ON ← OFF
C401
C403
C402
R401 100k(A) MAX MIN BASS
R402 100k(A) MAX MIN TREBLE
R403 20k(A) MAX MIN VOLUME
DRIVE AMP Q208 Q209
POWER AMP Q211,212
T203
NFB
S201 RADIO/LINE IN
S201-5 OFF → ON → SLEEP
S205 MOTOR
(ON: WHEN FORWARD, FAST FORWARD OR REWIND BUTTON IS PRESSED)
DNM-1200A
M
J201-2 REMOTE
B+ PREAMP LINE AMP METER AMP
B+ (POWER AMP)
CNJ201
(OFF: WHEN POWER CORD IS INSERTED)
UM-1×4 6V
DRY BATTERY, SIZE "D" (IEC DESIGNATION R20) 4 PCS, 6V
RECT D203
T204
AC INPUT

SECTION 2
DISASSEMBLY

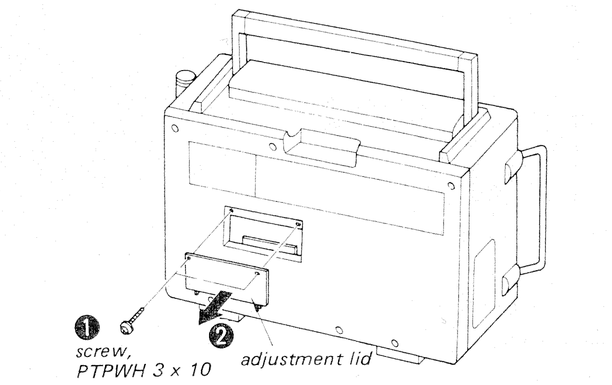
2-1. REMOVAL

REAR CASE


❶
self-tapping screw,
P 4 x 95
❷
rear case

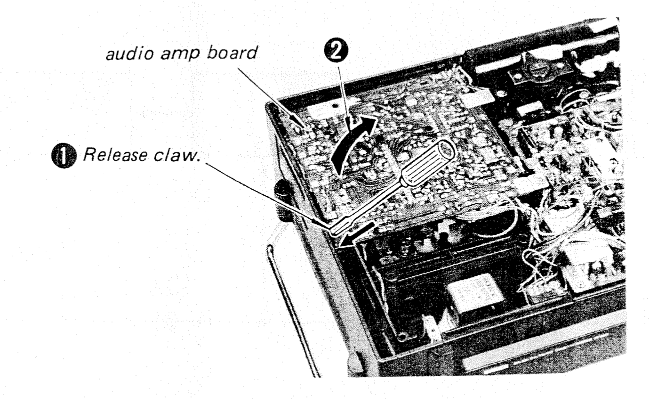
- SW Dial Scale Adjustment
- SW 1st Mixer Adjustment
- SW 2nd Oscillator Adjustment
- MARKER Adjustment

ADJUSTMENT LID

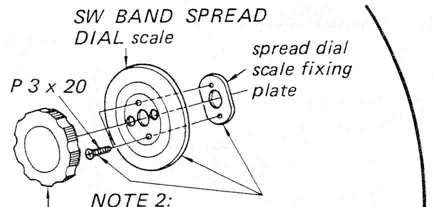

❶
screw,
PTPWH 3 x 10
❷
adjustment lid

- SW Tracking Adjustment
- MW/SW 2nd IF Alignment
- MW Frequency Coverage Adjustment
- MW Tracking Adjustment
- FM IF Adjustments, (1) and (2)
- FM Frequency Coverage Adjustment
- FM Tracking Adjustment
- BFO Adjustment

AUDIO AMP BOARD

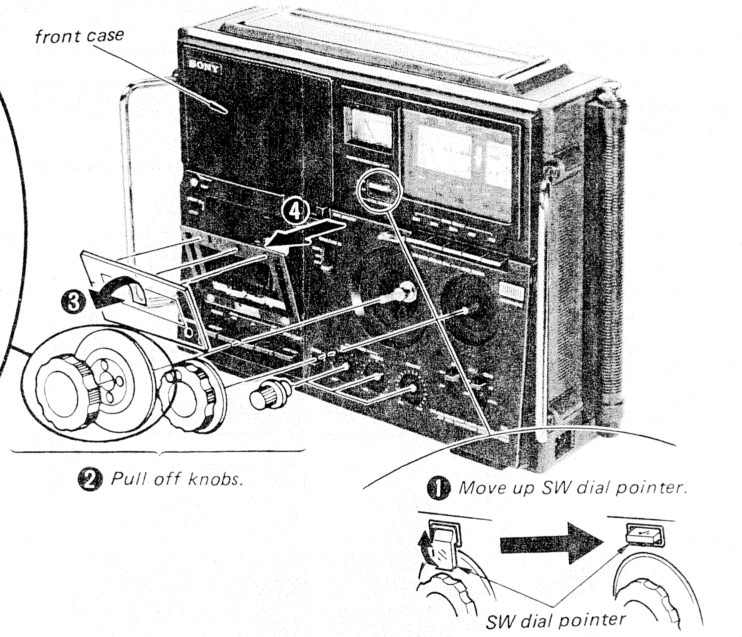

audio amp board
❷
❶ Release claw.

FRONT CASE

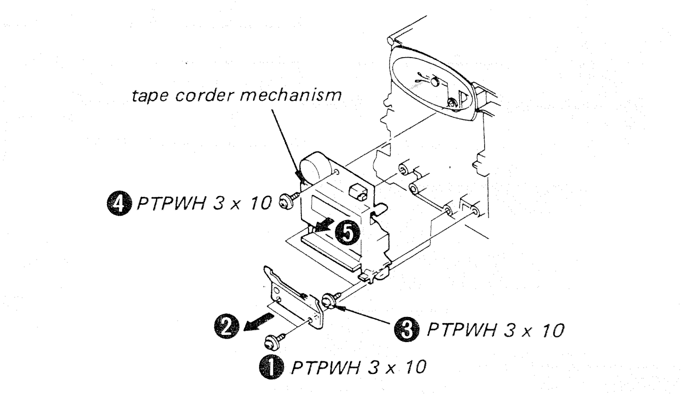

SW BAND SPREAD
DIAL scale
spread dial
scale fixing
plate
P 3 x 20

NOTE 2:
Loosen screws P 3 x 20. Then push the screw heads and release the scale fixing plate. And then remove the scale.

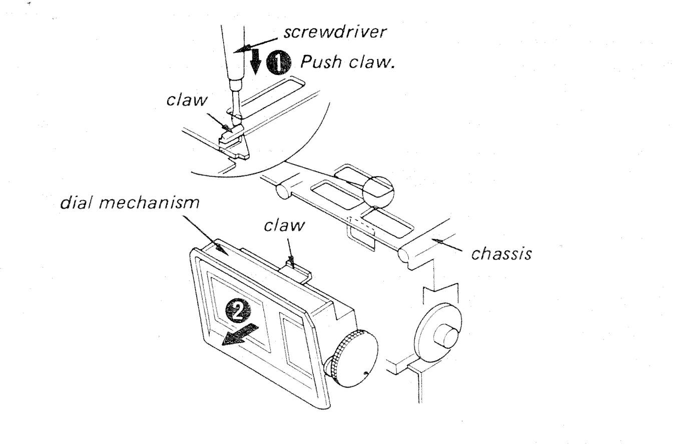
NOTE 1:
Turn SW BAND SPREAD DIAL knob either full-counterclockwise or full-clockwise stop position. Slowly turn the knob in the same direction beyond the stop position and remove the knob.


front case
❹
❸
❷ Pull off knobs.
❶ Move up SW dial pointer.
SW dial pointer

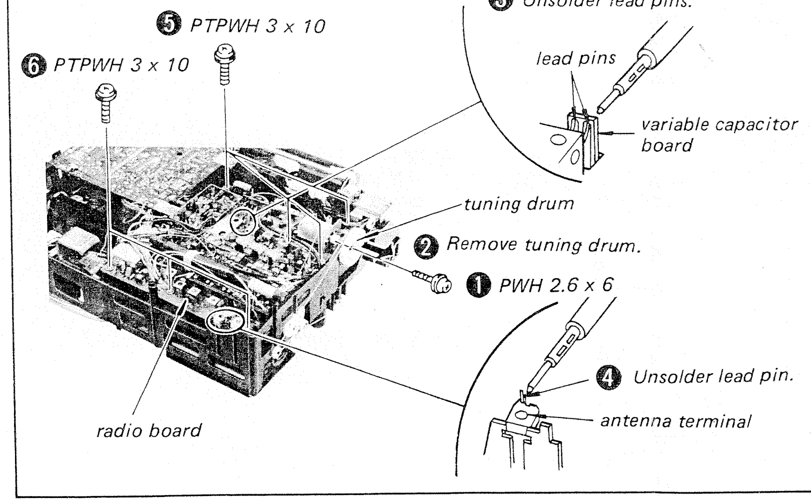
TAPE CORDER MECHANISM


tape corder mechanism
❹ PTPWH 3 x 10
❺
❷
❸ PTPWH 3 x 10
❶ PTPWH 3 x 10

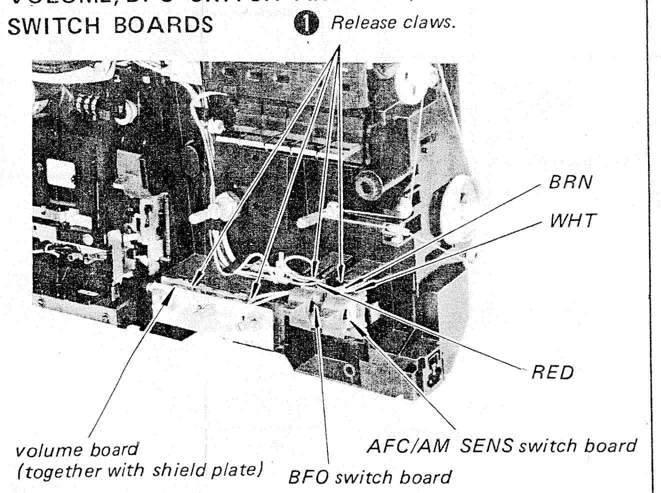
DIAL MECHANISM


screwdriver
❶ Push claw.
claw
dial mechanism
claw
chassis
❷

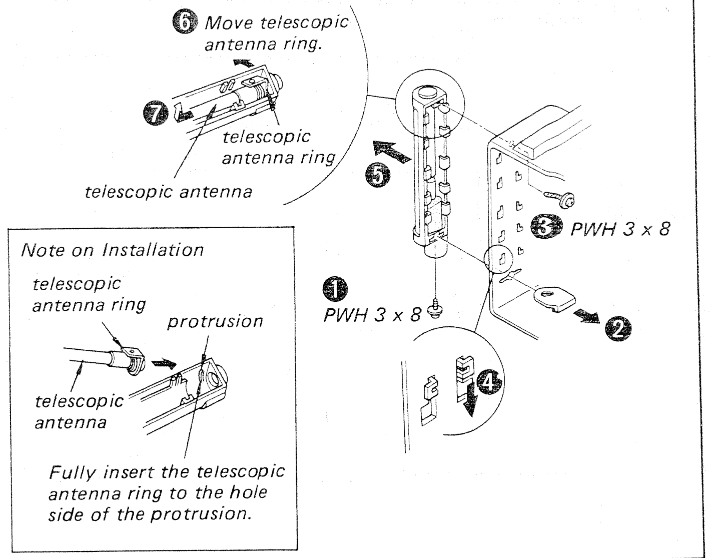
RADIO BOARD


❺ PTPWH 3 x 10
❻ PTPWH 3 x 10
❸ Unsolder lead pins.
lead pins
variable capacitor
board
tuning drum
❷ Remove tuning drum.
❶ PWH 2.6 x 6
❹ Unsolder lead pin.
antenna terminal
radio board

VOLUME, BFO SWITCH AND AFC/AM SENS. SWITCH BOARDS


❶ Release claws.
BRN
WHT
RED
volume board
(together with shield plate)
BFO switch board
AFC/AM SENS switch board

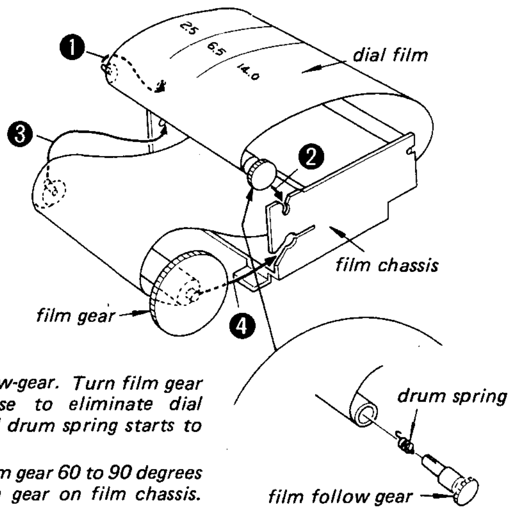
TELESCOPIC ANTENNA


❻ Move telescopic
antenna ring.
❼
telescopic
antenna ring
telescopic antenna
❺
❸ PWH 3 x 8
❶
PWH 3 x 8
❷
❹
telescopic
antenna ring
protrusion
telescopic
antenna

Note on Installation

Fully insert the telescopic antenna ring to the hole side of the protrusion.

2-2. DIAL FILM INSTALLATION

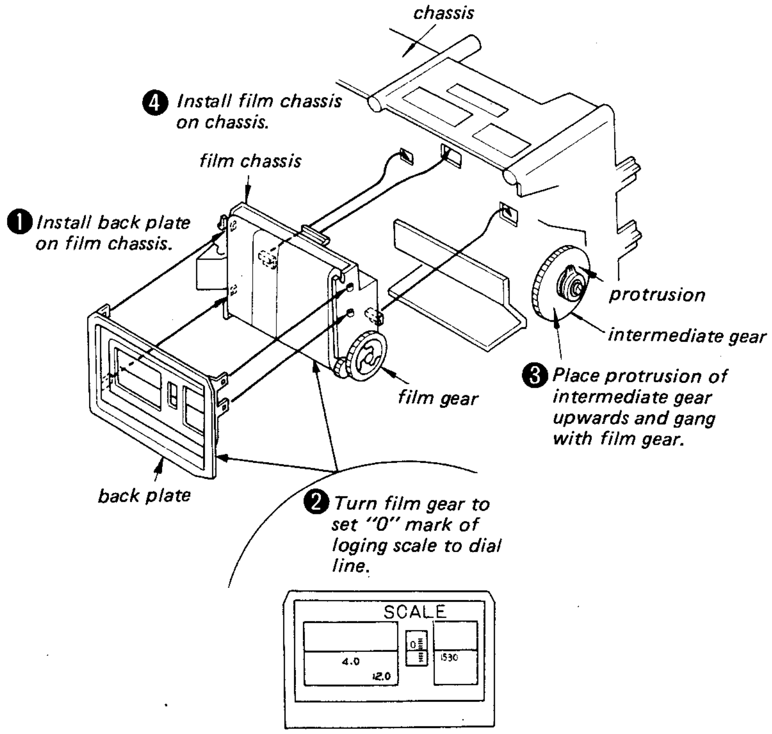

❶
2.5
6.5
14.0
dial film
❸
❷
film chassis
film gear
❹
drum spring
film follow gear

❹

1) Hold film follow-gear. Turn film gear counterclockwise to eliminate dial film slack until drum spring starts to act.

2) Further turn film gear 60 to 90 degrees and install film gear on film chassis.

2-3. BACK PLATE AND FILM CHASSIS INSTALLATION


chassis
film chassis
protrusion
intermediate gear
film gear
back plate
SCALE
0
4.0
12.0
1530

❶ *Install back plate on film chassis.*

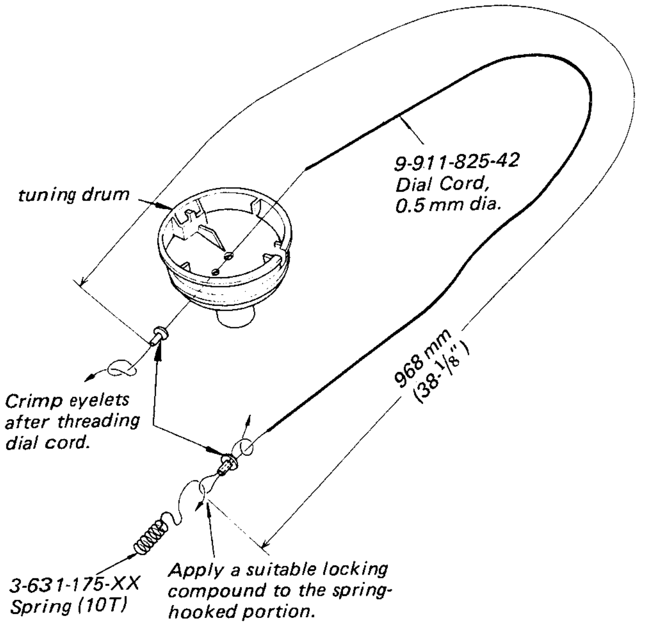
❷ *Turn film gear to set "0" mark of loging scale to dial line.*

❸ *Place protrusion of intermediate gear upwards and gang with film gear.*

❹ *Install film chassis on chassis.*

2-4. DIAL CORD STRINGING

1) Dial Cord Preparation

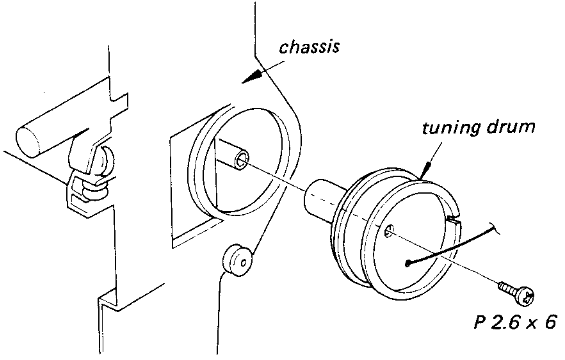

tuning drum
9-911-825-42
Dial Cord,
0.5 mm dia.
968 mm
(38-1/8")
3-631-175-XX
Spring (10T)

Crimp eyelets after threading dial cord.

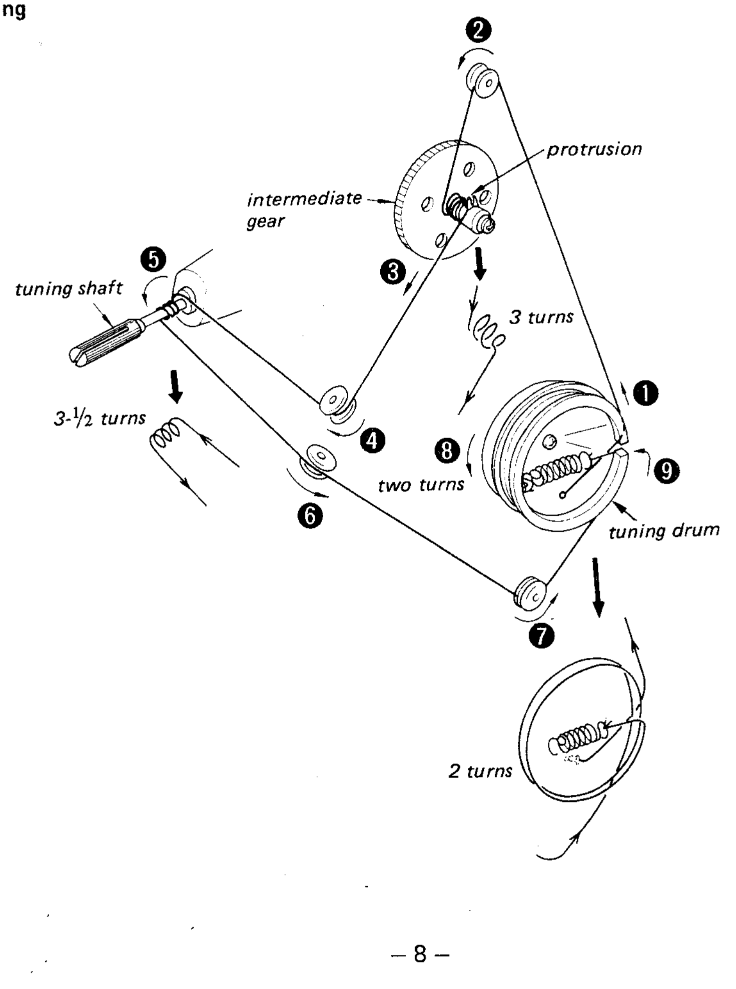
Apply a suitable locking compound to the spring-hooked portion.

2) Tuning Drum Installation

Install tuning drum on chassis.


chassis
tuning drum
P 2.6 x 6

3) Dial Cord Stringing


❷
protrusion
intermediate gear
❸
3 turns
❺
tuning shaft
3-1/2 turns
❹
❶
❽
two turns
❾
❻
tuning drum
❼
2 turns

SECTION 3

ADJUSTMENTS

TAPE RECORDER SECTION

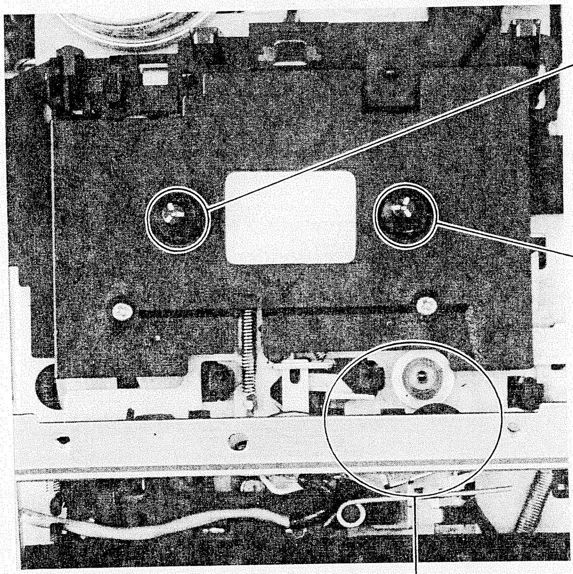
PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply a suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

1. MECHANICAL ADJUSTMENT



Rewind Torque

Use type CQ-201A cassette torque meter.

55 – 100 g · cm (0.8 – 1.3 oz · inch)

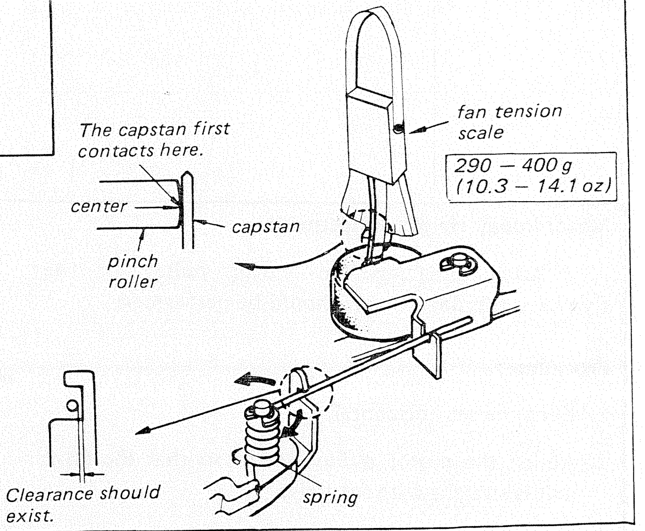
Forward and Fast Forward Torque

Forward torque:	Use type CQ-101A, CQ-102A or CQ-103A cassette torque meter. 22.5 – 55 g · cm (0.35 – 0.75 oz · inch)
Fast forward torque:	Use type CQ-201A cassette torque meter. 55 – 100 g · cm (0.8 – 1.3 oz · inch)

Pinch Roller Pressure Adjustment

– playback mode –

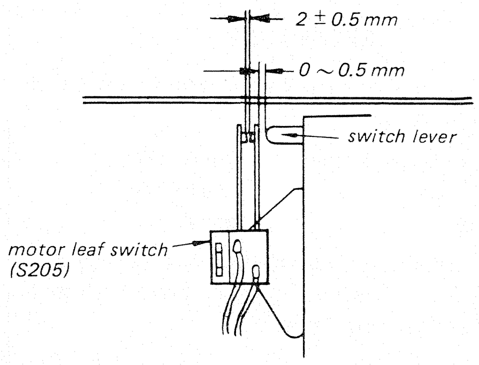
1. Push the pinch roller.
2. Slowly return the pinch roller and read the fan tension scale just when the pinch roller starts to rotate.

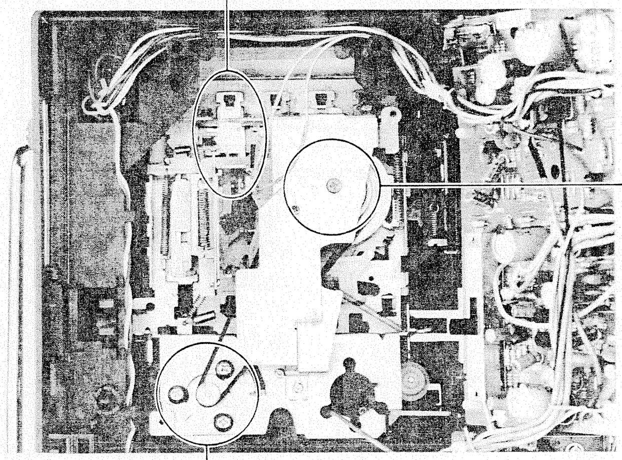

The capstan first contacts here.
center
pinch roller
capstan
fan tension scale
290 – 400 g (10.3 – 14.1 oz)
Clearance should exist.
spring

Motor Leaf Switch (S205) Position Adjustment

— stop mode —

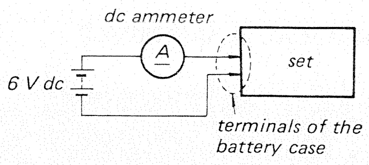
Adjust the leaves of the switch to obtain the indicated clearances between switch contacts and between switch leaf and switch lever.


2 ± 0.5 mm
0 ~ 0.5 mm
switch lever
motor leaf switch
(S205)

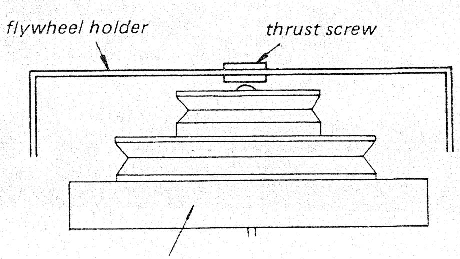


Flywheel Thrust Play Adjustment

— playback mode —


dc ammeter
A
6 V dc
set
terminals of the
battery case

1. Loosen the screw until the screw detaches from the flywheel shaft.
2. Gradually turn the screw clockwise to the position where the motor current suddenly increases.
3. Then, loosen the screw about ¼ turn from the position obtained in step 2.

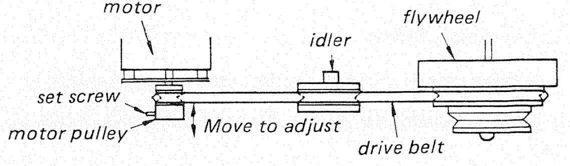

flywheel holder
thrust screw
flywheel

Motor Pulley Height Adjustment

After replacing the motor pulley or the flywheel, this adjustment should be performed.

Procedure:

1. Keep the set horizontal.
2. Adjust the motor pulley height so that the drive belt is straight without twist.


motor
idler
flywheel
set screw
motor pulley
Move to adjust
drive belt

2. ELECTRICAL ADJUSTMENT

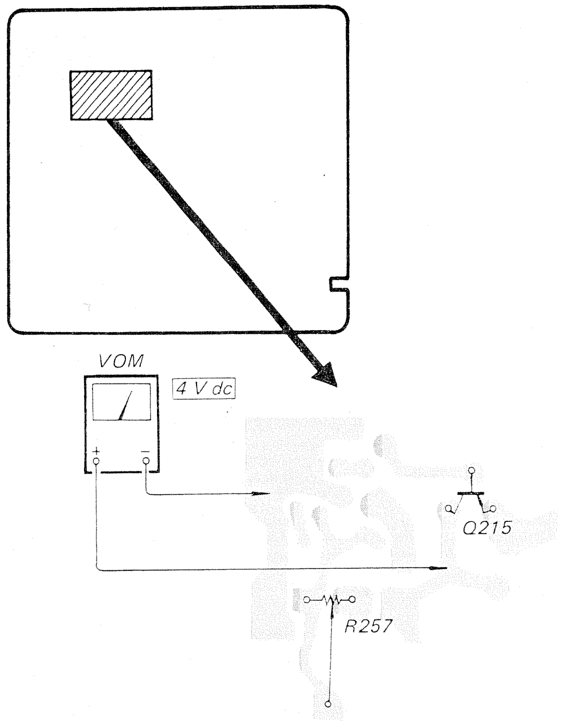
B+ Voltage Adjustment

Settings:

Power supply voltage:	6 V dc
RADIO/LINE IN switch:	OFF
VOLUME control:	minimum
Mode:	playback with no signal

Adjustment Location and Specification:

– audio amp board –


VOM
4 V dc
Q215
R257

Note: When R257 is turned clockwise, B+ voltage rises.

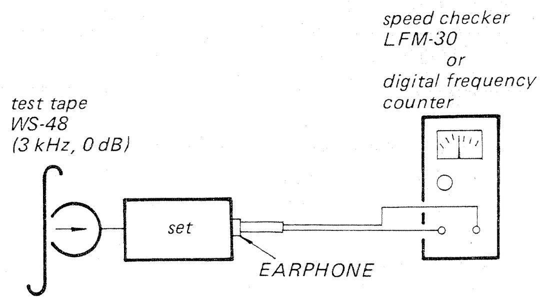
Tape Speed Adjustment

Setting:

VOLUME control: center of rotation

Procedure:

Mode: playback

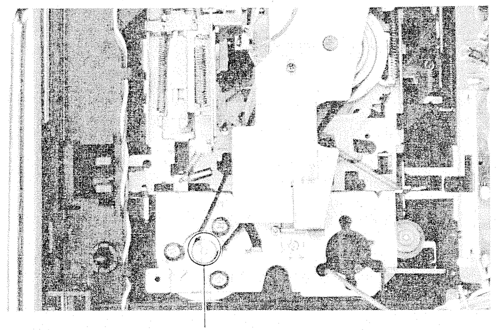

speed checker
LFM-30
or
digital frequency
counter
test tape
WS-48
(3 kHz, 0 dB)
set
EARPHONE

Specification:

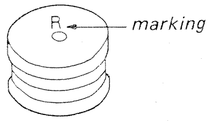
Speed Checker	Digital Frequency Counter
+1.5, –2 %	2,940 – 3,045 Hz

Frequency difference between beginning and end of tape should be within 1 % (30 Hz).

Adjustment Location:


motor pulley

If necessary, replace the motor pulley.



Motor Pulley Part No.	Marking	Tape Speed Change	
3-701-813-07	N	–2 %	down
3-701-813-07	P	–1 %	
3-701-813-08	Q		
3-701-813-08	R	+1 %	
3-701-813-09	S	+2 %	up

Note: Perform the motor pulley height adjustment.

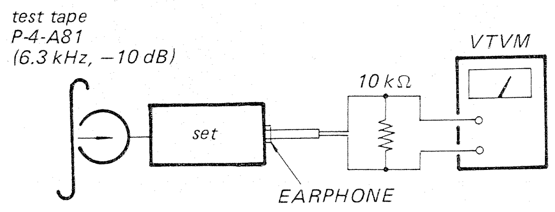
Record/Playback Head Azimuth Adjustment

Setting:

VOLUME control: center of rotation

Procedure:

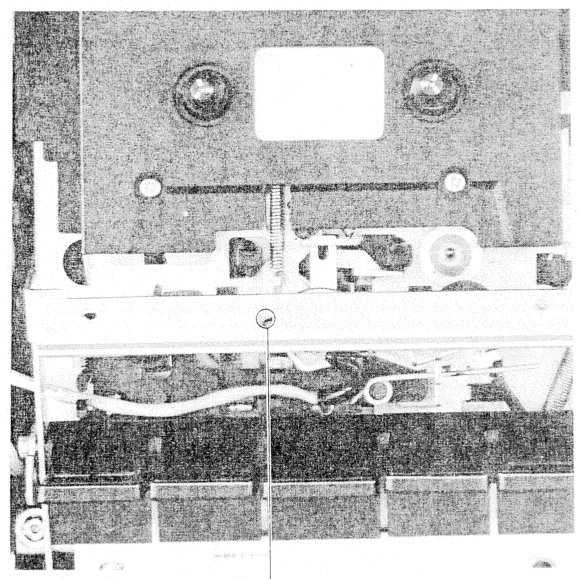
1. Mode: playback


test tape
P-4-A81
(6.3 kHz, –10 dB)
VTVM
10 kΩ
set
EARPHONE

2. Turn the adjustment screw for the highest VTVM reading.

Note: Several peaks may appear, take the highest.

Adjustment Location:

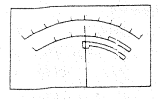

adjustment screw

Battery Meter Calibration

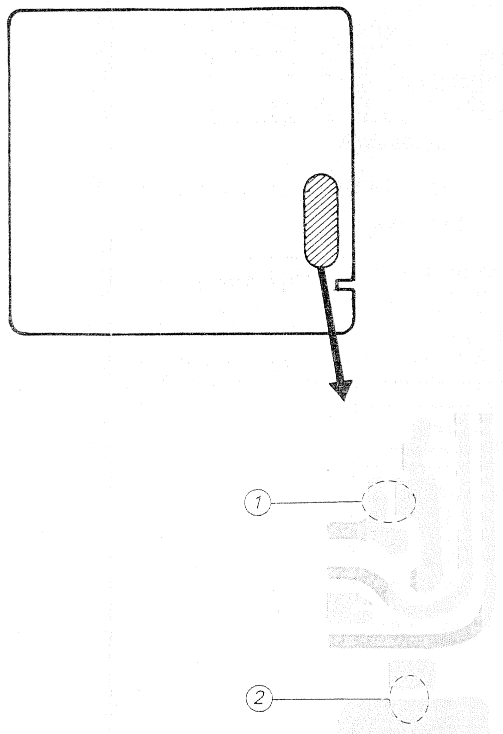
Setting:

Power Supply Voltage:	4.4 V dc
VOLUME control:	minimum
RADIO/ LINE IN switch:	OFF
Mode:	playback with no cassette loaded Place the set vertically

Adjustment Location and Specification:

Pattern Connection	Pointer Deflection	Meter Indication
open	up	
①		
②		
① and ②	down	

– audio amp board –



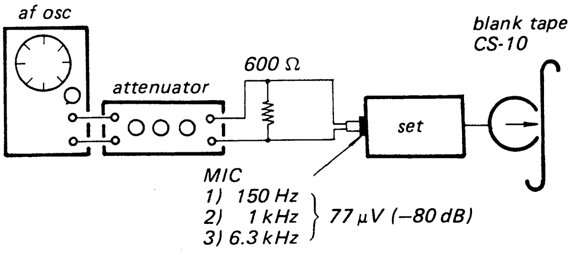
Record Bias Adjustment

Setting:

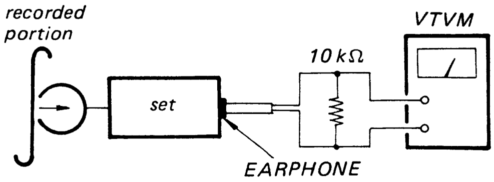
TONE controls: center of rotation
RADIO/LINE IN switch: OFF

Procedure:

1. Mode: record


af osc
attenuator
600 Ω
set
blank tape
CS-10
MIC
1) 150 Hz
2) 1 kHz
3) 6.3 kHz
77 μV (−80 dB)

2. Mode: playback


recorded
portion
set
10 kΩ
VTVM
EARPHONE

Playback 1 kHz. Adjust VOLUME control for 0.25 V (−10 dB) VTVM reading.

3.

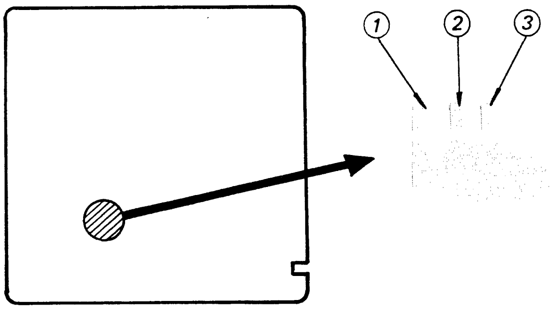
Playback	Adjust pattern connection	VTVM reading
150 Hz 6.3 kHz	①, ②, ③	0.17 V − 0.35 V (− 13 dB − − 7 dB)

Pattern connection	6.3 kHz VTVM reading
①	up
②	↕
③	down

4. If necessary, repeat above steps.

Adjustment Location:

– audio amp board –

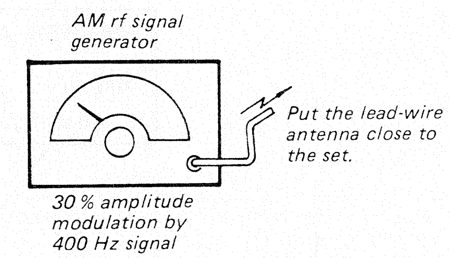


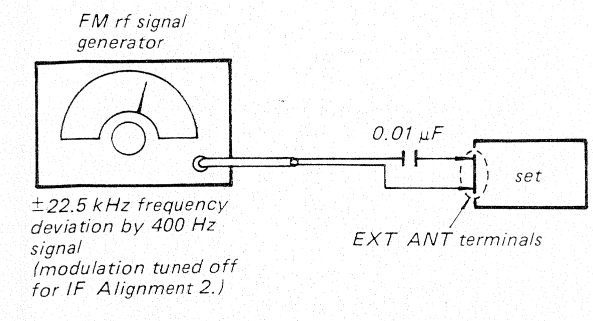
MEMO

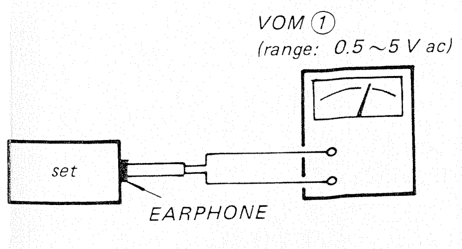
RADIO SECTION

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

- AFC/AM SENS switch: OFF/LOCAL
- BFO switch: OFF
- SW BAND SPRED DIAL: 0


AM rf signal generator
Put the lead-wire antenna close to the set.
30 % amplitude modulation by 400 Hz signal

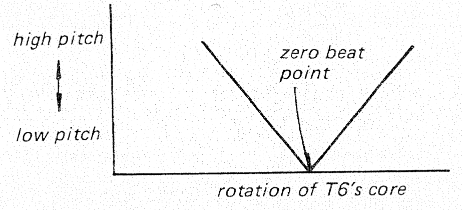

FM rf signal generator
0.01 μF
set
±22.5 kHz frequency deviation by 400 Hz signal
(modulation tuned off for IF Alignment 2.)
EXT ANT terminals


VOM ①
(range: 0.5 ~ 5 V ac)
set
EARPHONE

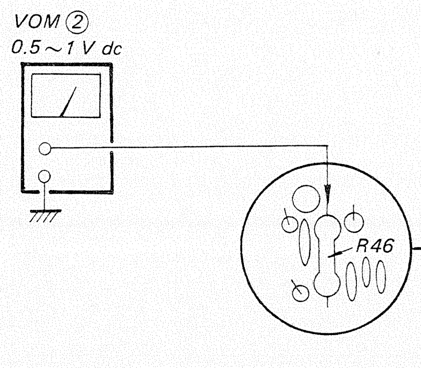
FM IF ALIGNMENT 1 (Select frequency according to the center frequency determined by the ceramic filter. Refer to the chart given in the SW 2nd Oscillator Adjustment.
Adjust for a maximum reading on VOM ①.
T1
T2
T3

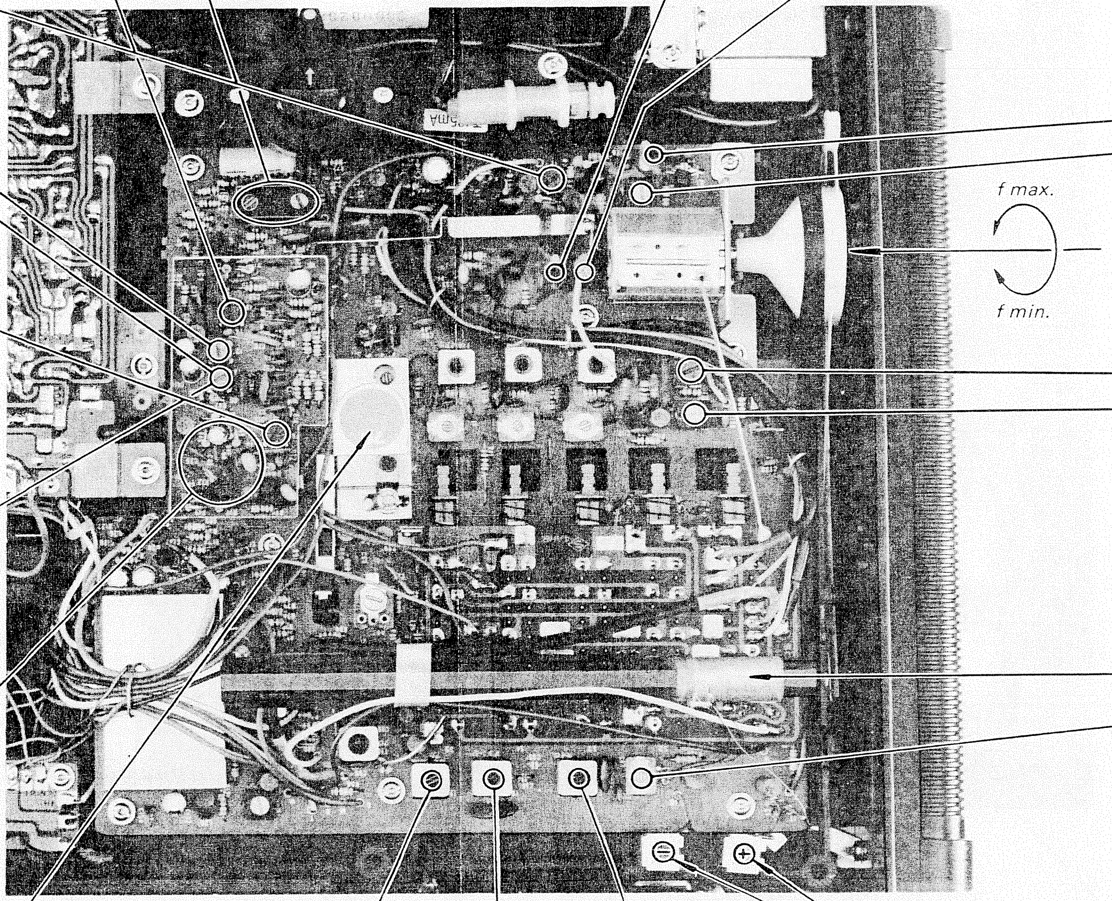
BFO ADJUSTMENT

1. Set the AM rf signal generator's dial to 1,400 kHz and turn the modulation off.
2. Set the dial of the set to 1,400 kHz and turn BFO switch ON.
3. Remove VOM from EARPHONE jack.
4. Adjust T6 to hear a zero beat from the speaker.



FM IF ALIGNMENT 2 (With no modulation)
Adjust for 0 V reading on VOM ②.
T3


VOM ②
0.5 ~ 1 V dc
R46



MW/SW 2nd IF ALIGNMENT	
Adjust for a maximum VOM ① reading.	
455 kHz (E, AEP Model) 468 kHz (UK Model)	CFA 1 (Do not adjust.)
T4	

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for maximum reading on VOM ①.	
87.1 MHz (87.5 MHz)	108.5 MHz (108 MHz)
L6	CT1-2

( ): in West Germany

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L3	87.1 MHz (87.5 MHz)
CT1-1	108.5 MHz (108 MHz)

( ): in West Germany

MW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
T11	520 kHz
CT10	1,680 kHz

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
ANT 2	620 kHz
CT6	1,400 kHz

Identification color label (the same color as ceramic filter's color mark)

T9 (SW1)	T8 (SW2)	T7 (SW3)
1.75 MHz	4 MHz	12 MHz
Adjust for a maximum reading on VOM ①.		
SW TRACKING ADJUSTMENT		

EXT ANT terminals

Setting:

BAND SELECT switch: SW1
X-TAL MARKER switch: OFF
BFO switch: OFF
AFC/AM SENS switch: OFF/LOCAL
MAIN TUNING: f max

MARKER ADJUSTMENT

Note: Perform this adjustment after SW 2nd Oscillator Adjustment.

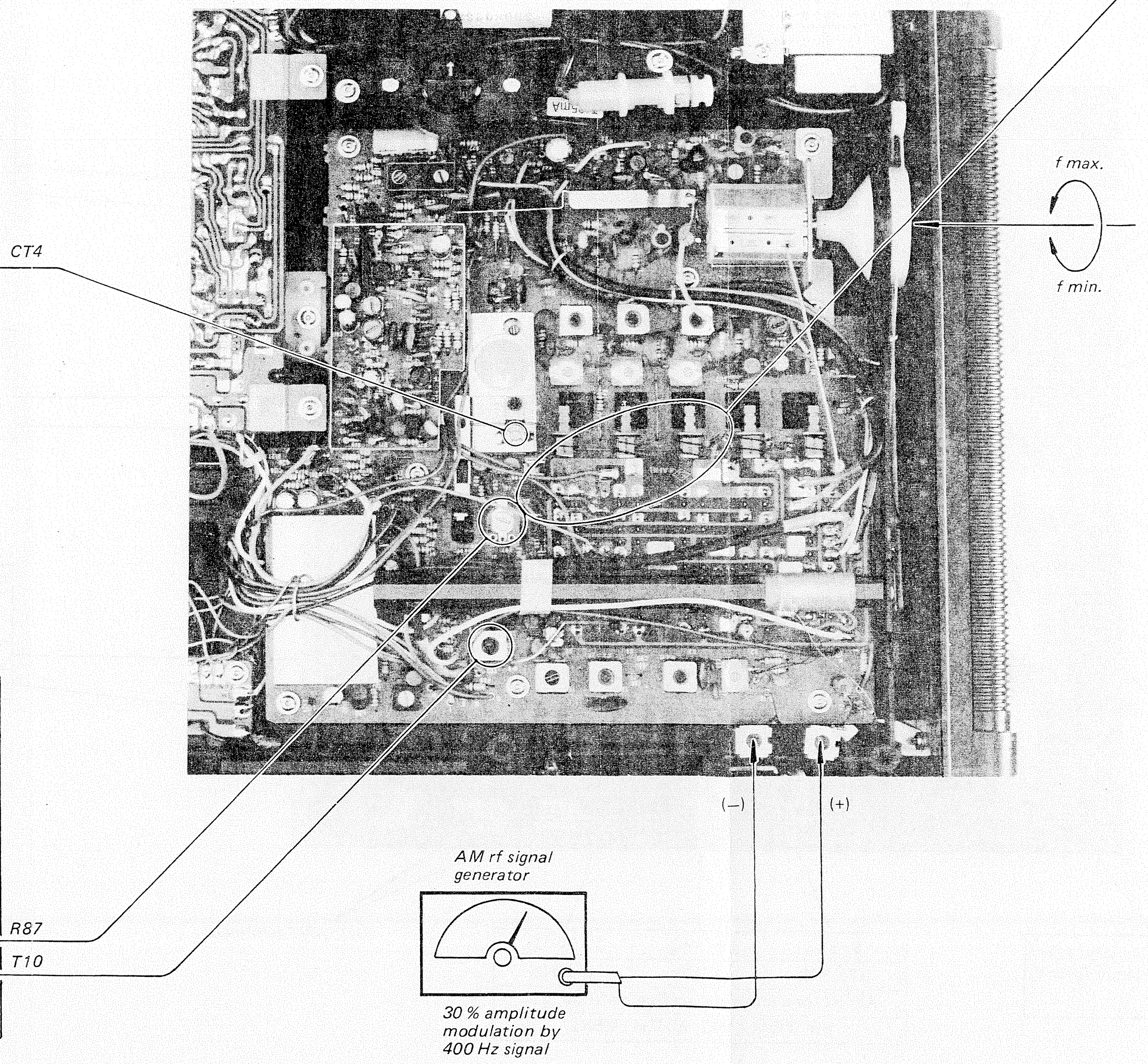
Procedure:

1. Set SW BAND SPREAD DIAL to "0" kHz.
2. Short-circuit check pins 1 and 2 as shown at upper-right corner.
3. Turn MAIN TUNING dial to obtain a zero beat.
4. Turn X-TAL MARKER on.
5. Adjust CT4 for a zero beat.
6. Turn X-TAL MARKER off. If the zero beat is off, i.e., a beat note is heard, repeat steps 2 through 5.
7. Remove the short.

SW 1st MIXER ADJUSTMENT

Procedure:

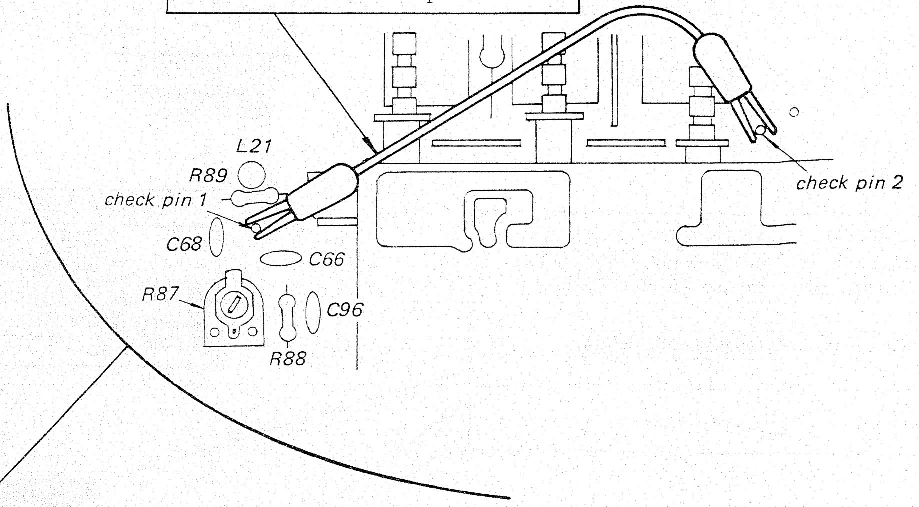
1. Set the VOM to 2.5 V ac range and connect it to EARPHONE jack.
2. Set the frequency of the AM rf signal generator to 4 MHz.
3. Set SW BAND SPREAD DIAL to "0" kHz.
4. Set R87 to the full-counterclockwise stop.
5. Adjust T10 for a maximum VOM reading.
6. Adjust R87 for a minimum VOM reading.


CT4
R87
T10
f max.
f min.
(–)
(+)
AM rf signal generator
30 % amplitude modulation by 400 Hz signal

MARKER ADJUSTMENT

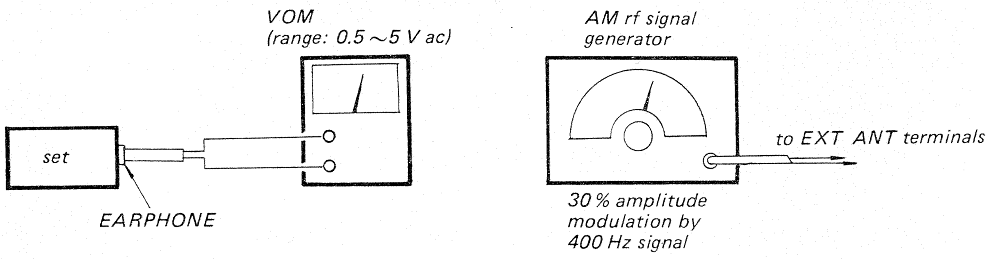
Step 2.

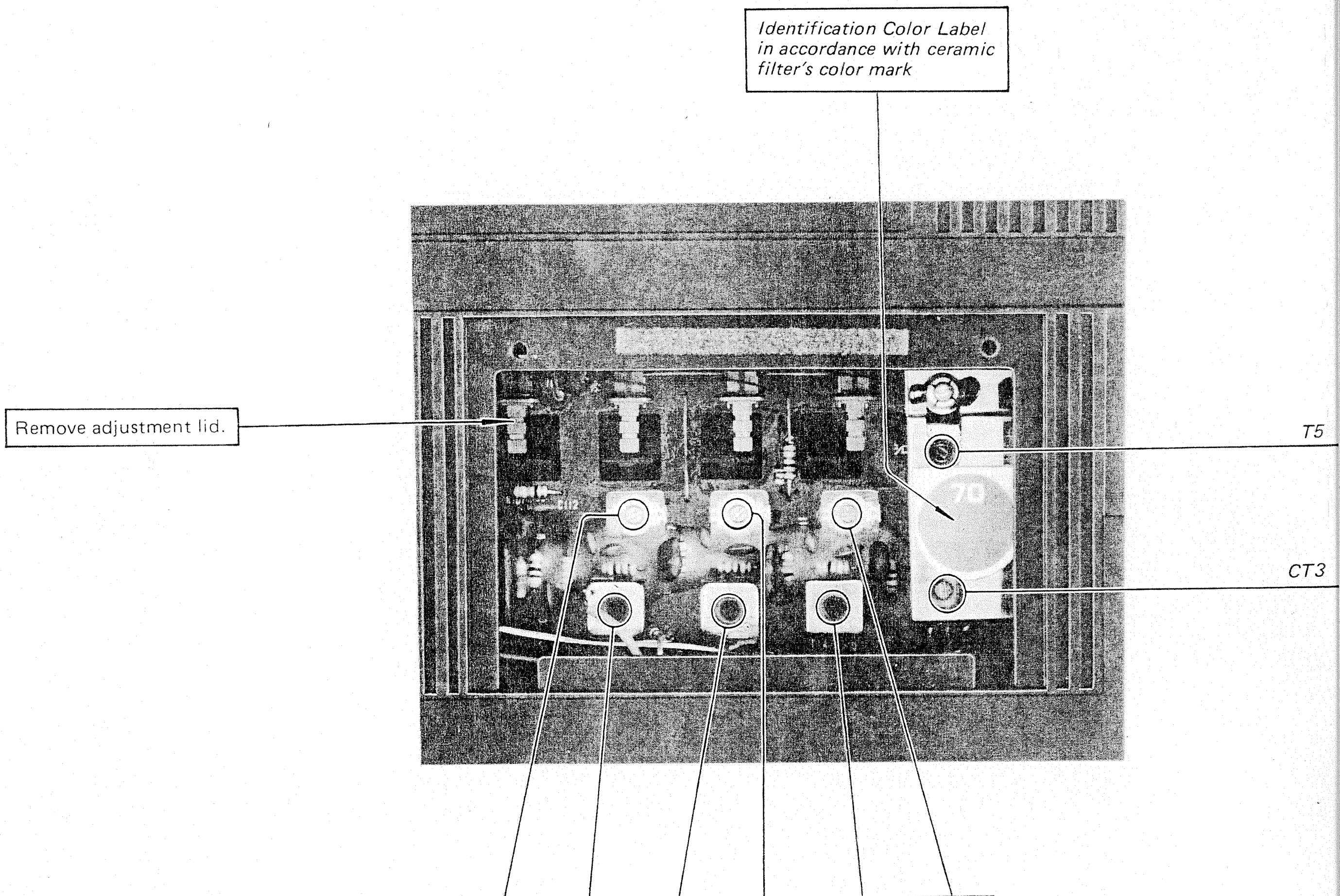
Short-circuit check pins 1 and 2.


L21
R89
check pin 1
C68
C66
R87
C96
R88
check pin 2

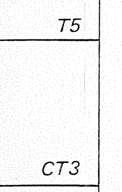
Setting:

X-TAL MARKER switch:	OFF
BFO switch:	OFF
AFC/AM SENS switch:	OFF/LOCAL


VOM
(range: 0.5 ∼ 5 V ac)
set
EARPHONE
AM rf signal generator
to EXT ANT terminals
30 % amplitude modulation by 400 Hz signal


Identification Color Label in accordance with ceramic filter's color mark
Remove adjustment lid.
T5
CT3
70

CT9	T12	T13	CT8	T14	CT7
22 MHz	12 MHz	4 MHz	10 MHz	1.75 MHz	4 MHz
SW3		SW2		SW1	
Set SW BAND SPREAD DIAL to "0" kHz. Adjust for a maximum VOM reading.					
SW DIAL SCALE ADJUSTMENT					



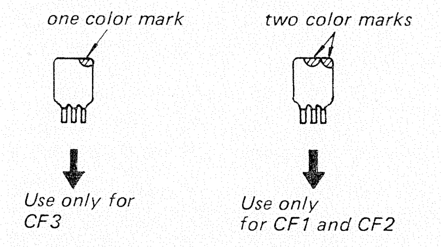
SW 2nd OSCILLATOR ADJUSTMENT

Note:

1. Proceed to the Marker Adjustment after this adjustment.
2. This adjustment is important to retain the receiver's SW BAND SPREAD DIAL accuracy. Precisely perform adjustment to retain a frequency coverage of 300 kHz ±3kHz.
3. The adjustment range of T5 is wide. Be careful not to adjust T5 to the image frequency, i.e., the frequency 910 kHz higher than the wanted frequency. The wanted frequency is obtained with the T5's core set at the more circuit-board side.
4. The center frequency of ceramic filters CF1 through CF3 is dependent upon the color mark on them.

   The color mark of all the ceramic filters CF1 through CF3 should be the same.

Identifying the Ceramic Filters


one color mark
two color marks

Use only for CF3

Use only for CF1 and CF2

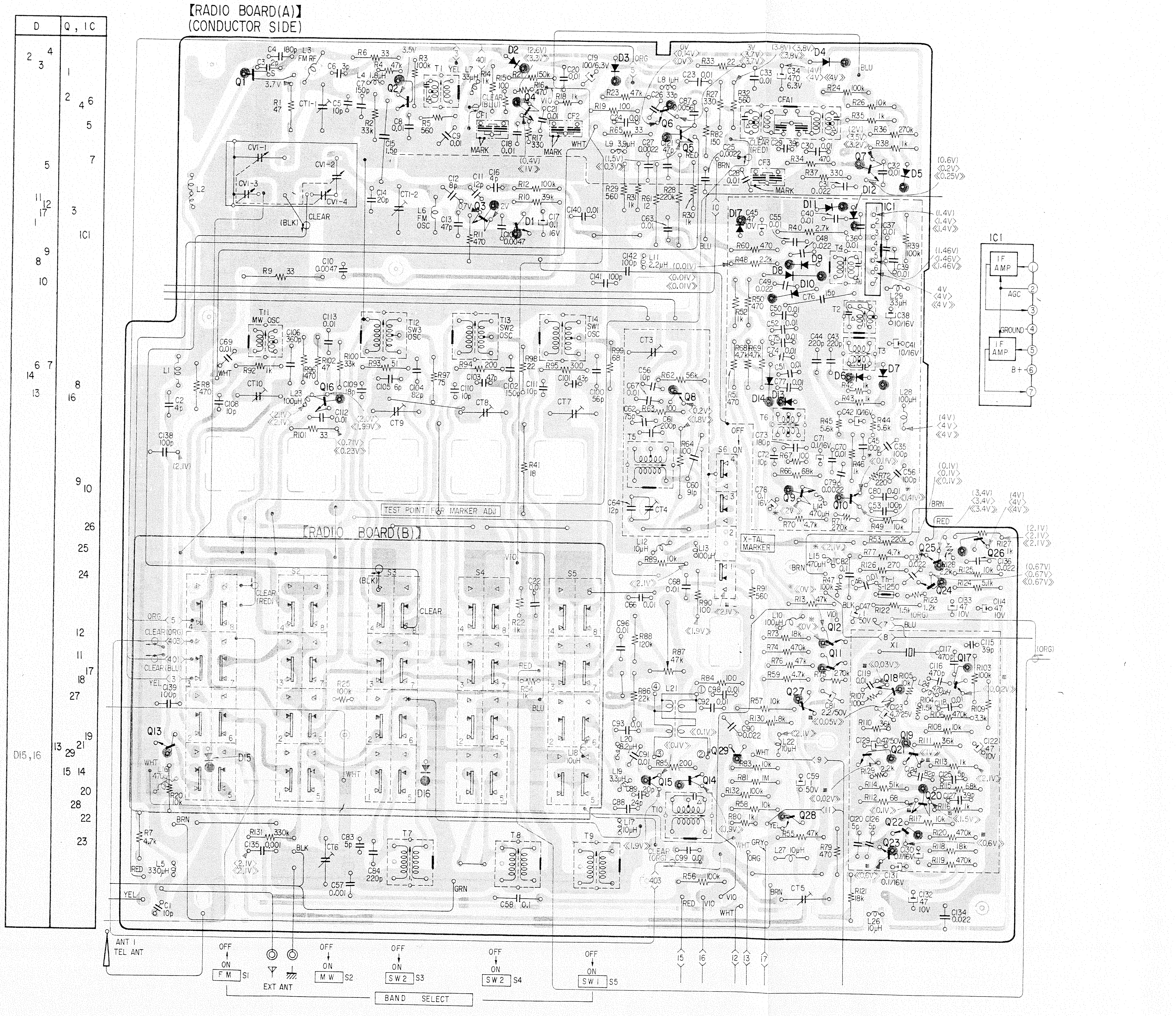
Procedure:

Adjust for maximum VOM reading.

Color Mark of CF1,2,3	Center Frequency of Ceramic Filters	SW BAND SPREAD DIAL	
		Full-counter-clockwise Stop (– side)	Full-clockwise Stop (+ side)
		Adjust CT3	Adjust T5
green	10.61 MHz	10.76 MHz	10.46 MHz
black	10.64 MHz	10.79 MHz	10.49 MHz
blue	10.67 MHz	10.82 MHz	10.52 MHz
red	10.70 MHz	10.85 MHz	10.55 MHz
orange	10.73 MHz	10.88 MHz	10.58 MHz
white	10.75 MHz	10.91 MHz	10.61 MHz
yellow	10.79 MHz	10.94 MHz	10.64 MHz

SECTION 4
DIAGRAMS

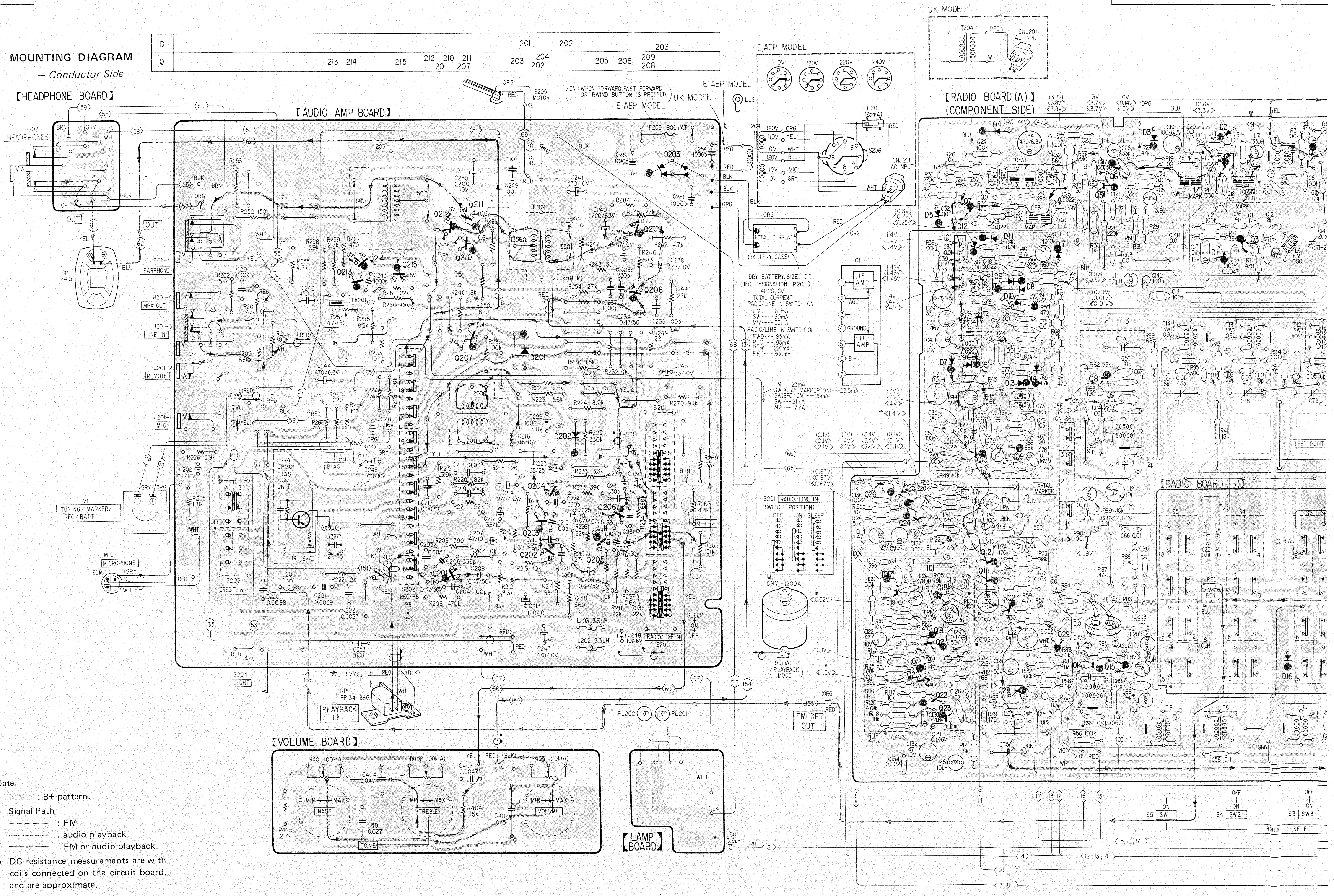
4-1. MOUNTING DIAGRAM – *Conductor Side* –


[RADIO BOARD(A)]
(CONDUCTOR SIDE)
[RADIO BOARD(B)]
D
Q, IC
IC1
IF AMP
AGC
GROUND
B+
TEST POINT FOR MARKER ADJ
X-TAL MARKER
ANT I
TEL ANT
EXT ANT
FM S1
MW S2
SW 2 S3
SW 2 S4
SW 1 S5
BAND SELECT
OFF
ON

4-2. MOUNTING DIAGRAM

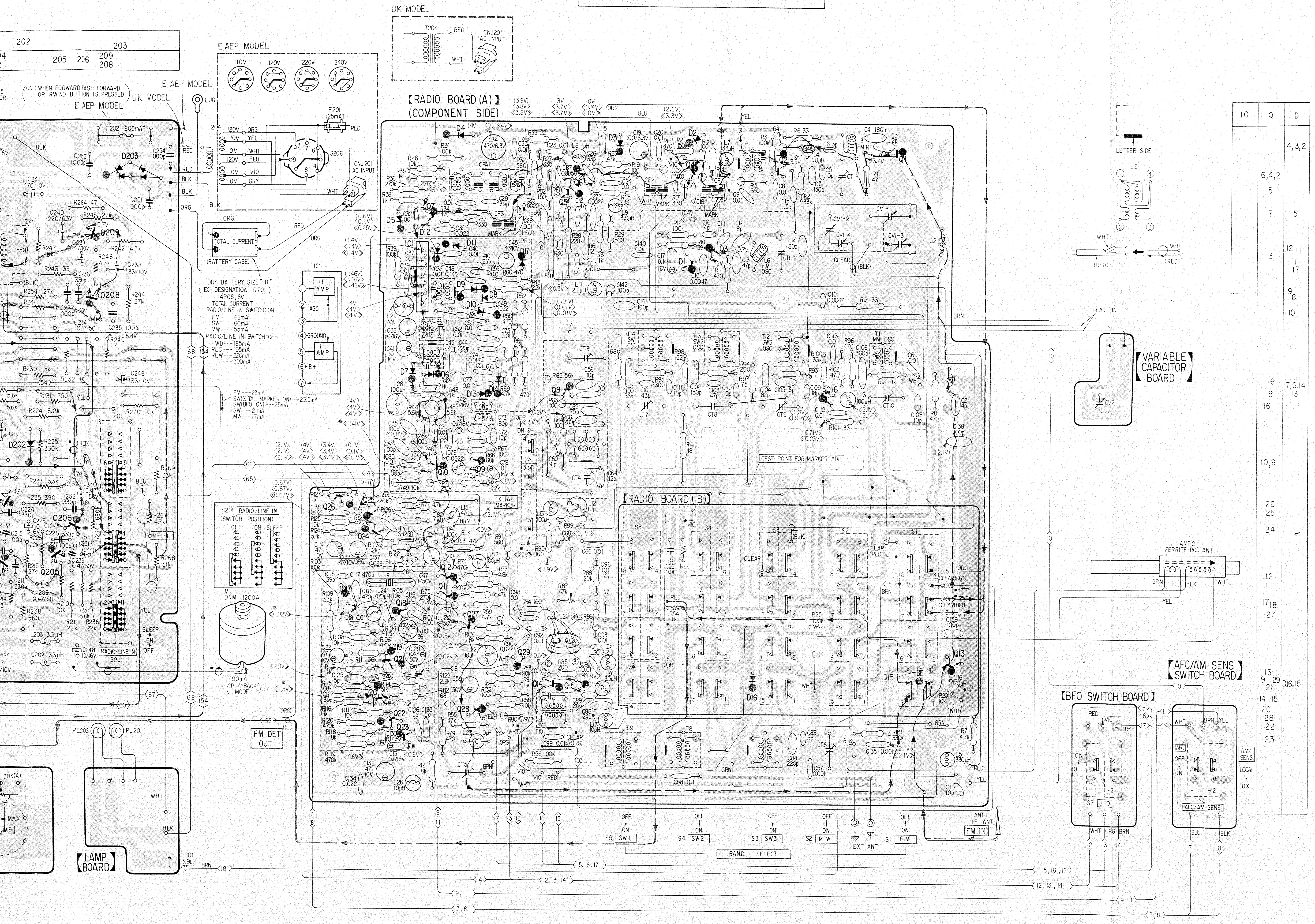
— Conductor Side —

D	201 202 203
Q	213 214 215 212 210 211 201 207 203 204 202 205 206 209 208

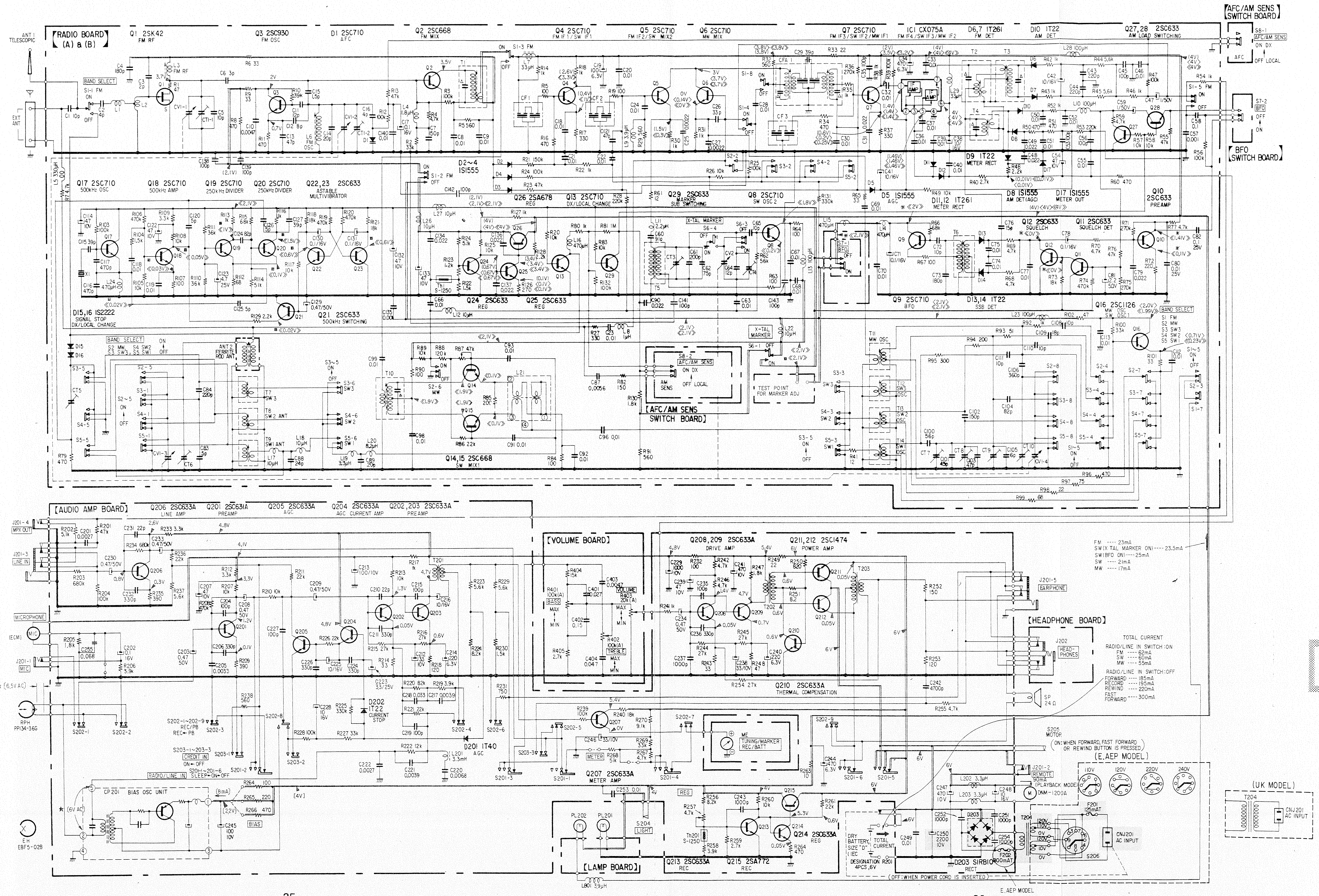

UK MODEL
T204
CNJ201 AC INPUT
E,AEP MODEL
110V 120V 220V 240V
【HEADPHONE BOARD】
J202 HEADPHONES
【AUDIO AMP BOARD】
S205 MOTOR
(ON: WHEN FORWARD, FAST FORWARD OR RWIND BUTTON IS PRESSED)
UK MODEL
E,AEP MODEL
F202 800mAT
D203
F201 125mAT
S206
CNJ201 AC INPUT
TOTAL CURRENT
(BATTERY CASE)
DRY BATTERY, SIZE "D" (IEC DESIGNATION R20) 4PCS, 6V
TOTAL CURRENT
RADIO/LINE IN SWITCH: ON
FM---- 62mA
SW---- 60mA
MW---- 55mA
RADIO/LINE IN SWITCH: OFF
FWD--- 185mA
REC--- 195mA
REW--- 220mA
FF--- 300mA
IC1
IF AMP
AGC
GROUND
IF AMP
B+
FM---23mA
SW(X-TAL MARKER ON)---23.5mA
SW(BFO ON)---25mA
SW--- 21mA
MW--- 17mA
【RADIO BOARD (A)】
(COMPONENT SIDE)
SP 24Ω
J201-5 EARPHONE
J201-4 MPX OUT
J201-3 LINE IN
J201-2 REMOTE
J201-1 MIC
ME TUNING/MARKER/REC/BATT
MIC MICROPHONE ECM
CP201 BIAS OSC UNIT
BIAS
S203 CREDIT IN
S202 REC/PB
S201 RADIO/LINE IN
SLEEP ON OFF
METER
S201 RADIO/LINE IN (SWITCH POSITION) OFF ON SLEEP
M DNM-1200A
90mA (PLAYBACK MODE)
X-TAL MARKER
TEST POINT
【RADIO BOARD (B)】
S204 LIGHT
RPH PP134-36G
PLAYBACK IN
PL202 PL201
FM DET OUT
【VOLUME BOARD】
R401 100k(A) R402 100k(A) R403 20k(A)
BASS TREBLE VOLUME
TONE
MIN MAX
【LAMP BOARD】
L801 3.9μH
S5 SW1 S4 SW2 S3 SW3
OFF ON
BAND SELECT
CLEAR

Note:

- ▒ : B+ pattern.
- Signal Path
  - ------ : FM
  - ——— : audio playback
  - —·—·— : FM or audio playback
- DC resistance measurements are with coils connected on the circuit board, and are approximate.


UK MODEL
T204
CNJ201 AC INPUT
E.AEP MODEL
110V
120V
220V
240V
E.AEP MODEL
LUG
UK MODEL
F202 800mAT
F201 125mAT
S206
(ON : WHEN FORWARD,FAST FORWARD OR RWIND BUTTON IS PRESSED)
TOTAL CURRENT
(BATTERY CASE)
DRY BATTERY, SIZE " D " (IEC DESIGNATION R20) 4PCS, 6V
TOTAL CURRENT
RADIO/LINE IN SWITCH:ON
FM ---- 62mA
SW ---- 60mA
MW ---- 55mA
RADIO/LINE IN SWITCH:OFF
FWD --- 185mA
REC --- 195mA
REW --- 220mA
F F --- 300mA
FM --- 23mA
SW(X'TAL MARKER ON) --- 23.5mA
SW(BFO ON) --- 25mA
SW --- 21mA
MW --- 17mA
IC1
IF AMP
AGC
GROUND
B+
S201 RADIO/LINE IN (SWITCH POSITION)
OFF ON SLEEP
M DNM-1200A
90mA (PLAYBACK MODE)
FM DET OUT
PL202
PL201
LAMP BOARD
L801 3.9μH
【RADIO BOARD (A)】 (COMPONENT SIDE)
CFA1
CF3
CF2
CF1
CVI-1
CVI-2
CVI-3
CVI-4
CLEAR
T14 SW1 OSC
T13 SW2 OSC
T12 SW3 OSC
T11 MW OSC
CT3
CT4
CT7
CT8
CT9
CT10
TEST POINT FOR MARKER ADJ
X-TAL MARKER
【RADIO BOARD (B)】
S5
S4
S3
S2
S1
R25
D15
D16
Q13
T7
T8
T9
T10
CT5
CT6
ANT1 TEL ANT
FM IN
EXT ANT
BAND SELECT
S5 SW1
S4 SW2
S3 SW3
S2 MW
S1 FM
OFF ON
LETTER SIDE
L21
LEAD PIN
【VARIABLE CAPACITOR BOARD】
CV2
ANT2 FERRITE ROD ANT
【BFO SWITCH BOARD】
S7 BFO
【AFC/AM SENS SWITCH BOARD】
S8 AFC/AM SENS
AM/SENS
LOCAL
DX
IC
Q
D

4-3. SCHEMATIC DIAGRAM


[RADIO BOARD] (A) & (B)
ANT 1 TELESCOPIC
EXT ANT
BAND SELECT
Q1 2SK42 FM RF
Q3 2SC930 FM OSC
D1 2SC710 AFC
Q2 2SC668 FM MIX
Q4 2SC710 FM IF1/SW IF1
Q5 2SC710 FM IF2/SW MIX2
Q6 2SC710 MW MIX
Q7 2SC710 FM IF3/SW IF2/MW IF1
IC1 CX075A FM IF4/SW IF3/MW IF2
D6,7 1T261 FM DET
D10 1T22 AM DET
Q27,28 2SC633 AM LOAD SWITCHING
[AFC/AM SENS SWITCH BOARD]
[BFO SWITCH BOARD]
Q17 2SC710 500kHz OSC
Q18 2SC710 500kHz AMP
Q19 2SC710 250kHz DIVIDER
Q20 2SC710 250kHz DIVIDER
Q22,23 2SC633 ASTABLE MULTIVIBRATOR
D2~4 1S1555
Q26 2SA678 REG
Q13 2SC710 DX/LOCAL CHANGE
Q29 2SC633 MARKER SUB SWITCHING
Q8 2SC710 SW OSC 2
D5 1S1555 AGC
D11,12 1T261 METER RECT
D9 1T22 METER RECT
D8 1S1555 AM DET(AGC)
D17 1S1555 METER OUT
Q10 2SC633 PREAMP
Q12 2SC633 SQUELCH
Q11 2SC633 SQUELCH DET
Q24 2SC633 REG
Q25 2SC633 REG
Q21 2SC633 500kHz SWITCHING
D15,16 1S2222 SIGNAL STOP DX/LOCAL CHANGE
Q9 2SC710 BFO
D13,14 1T22 SSB DET
Q16 2SC1126 MW OSC SW OSC1
X-TAL MARKER
[AFC/AM SENS SWITCH BOARD]
TEST POINT FOR MARKER ADJ
ANT 2 FERRITE ROD ANT
Q14,15 2SC668 SW MIX1
[AUDIO AMP BOARD]
Q206 2SC633A LINE AMP
Q201 2SC631A PREAMP
Q205 2SC633A AGC
Q204 2SC633A AGC CURRENT AMP
Q202,203 2SC633A PREAMP
J201-4 MPX OUT
J201-3 LINE IN
MICROPHONE
(ECM) MIC
J201-1 MIC
★(6.5V AC)
RPH PP134-36G
EH EBF5-02B
[VOLUME BOARD]
BASS
TREBLE
VOLUME
Q208,209 2SC633A DRIVE AMP
Q211,212 2SC1474 POWER AMP
Q210 2SC633A THERMAL COMPENSATION
D202 1T22 CURRENT STOP
D201 1T40 AGC
CP201 BIAS OSC UNIT
BIAS
RADIO/LINE IN SLEEP-ON-OFF
CREDIT IN
Q207 2SC633A METER AMP
ME TUNING/MARKER REC/BATT
METER
REC
PL202 PL201
S204 LIGHT
[LAMP BOARD]
Q213 2SC633A REC
Q215 2SA772 REC
Q214 2SC633A REG
J201-5 EARPHONE
[HEADPHONE BOARD]
J202 HEAD-PHONES
SP 24Ω
FM ---- 23mA
SW(X TAL MARKER ON)---- 23.5mA
SW(BFO ON)----25mA
SW ---- 21mA
MW ---- 17mA
TOTAL CURRENT
RADIO/LINE IN SWITCH:ON
FM ---- 62mA
SW ---- 60mA
MW ---- 55mA
RADIO/LINE IN SWITCH:OFF
FORWARD ---- 185mA
RECORD ---- 195mA
REWIND ---- 220mA
FAST FORWARD ---- 300mA
S205 MOTOR
(ON: WHEN FORWARD, FAST FORWARD OR REWIND BUTTON IS PRESSED)
J201-2 REMOTE
M DNM-1200A
(E,AEP MODEL)
110V 120V 220V 240V
DRY BATTERY, SIZE "D" (IEC DESIGNATION R20) 4PCS,6V
TOTAL CURRENT
D203 SIRBIO RECT
F201 125mAT
F202 800mAT
CNJ201 AC INPUT
S206
(OFF: WHEN POWER CORD IS INSERTED)
E,AEP MODEL
(UK MODEL)
T204
CNJ201 AC INPUT

Note:
- All 50
- All kΩ
- Vo not
- Vo tol
- △
- AC circ
- Rea VO
- Tot
- Sw

Note: The com safety.

Note:

- All capacitors are in µF unless otherwise noted. pF = µµF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ = 1000 Ω, MΩ = 1000 kΩ
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- △ : internal component.
- ☐ : panel designation.
- ☐ : adjustment for repair.
- AC voltage readings indicated by ★ in the bias oscillator circuit are taken with a VTVM.
- Readings are taken under no-signal conditions with a VOM (20 kΩ/V).
  - RADIO SECTION
    < >: MW
    ≪ ≫: SW
    ✳ : WHEN S7 (BFO) IS ON
    ▪ : WHEN S6 (X-TAL MARKER) IS ON
    no mark: FM
  - AUDIO AMP SECTION
    [ ] : RECORD MODE
    no mark: PLAYBACK MODE
- Total current is measured with no cassette installed.
- ▬ : B+ bus.
- Switch

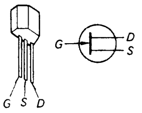
Ref. No.	Switch	Position
S1	FM	ON
S2	MW	OFF
S3	SW3	OFF
S4	SW2	OFF
S5	SW1	OFF
S6	X-TAL MARKER	OFF
S7	BFO	ON
S8	AFC/AM SENS	OFF/LOCAL
S201	RADIO/LINE IN	OFF
S202	REC/PB	PB
S203	CREDIT/IN	OFF
S204	LIGHT	OFF
S205	MOTOR	OFF
S206	VOLTAGE SELECTOR	110 V (E, AEP Model)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

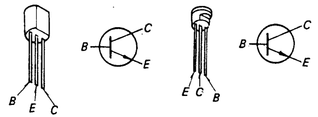
Replacement Semiconductors

For replacement, use semiconductors except in ( ).

Q1: 2SK42-1

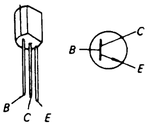


Q2, 14, 15: 28C1129 (2SC668)
Q3: 2SC930

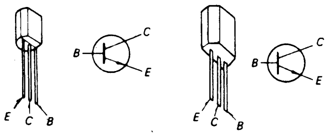


2SC1129 2SC668, 2SC930

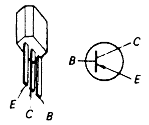
Q4 – 8, Q13 : 2SC710-4 (2SC710)
Q9, Q17 – 20, D1 : 2SC710-3 (2SC710)
Q16: 2SC1126-D (2SC1126)



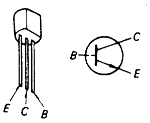
Q10 – 12, Q21 – 25, Q27 – 29 : 2SC1364-7 (2SC633)
Q201: 2SC632A (2SC631A)
Q202 – 204, Q206 – 210, Q213, 214 : 2SC1364-7 (2SC633A)
Q205: 2SC1364-7-1 (2SC633A)



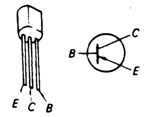
Q26: 2SA678-7 (2SA678)



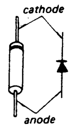
Q211, 212: 2SC1474-3 (2SC1475)



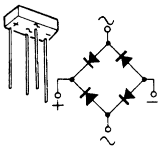
Q215: 2SA684-R (2SA772)



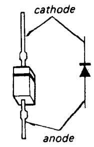
D2 – 5, D8, 17 : 1S1555 (1T40)
D6, 7, D11, 12 : 1T261
D910, D13, 14, D202 : 1T22A (1T22)
D201: 1S1555 (1T40)



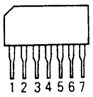
D203: SIRB10



D15, 16: 1S2222



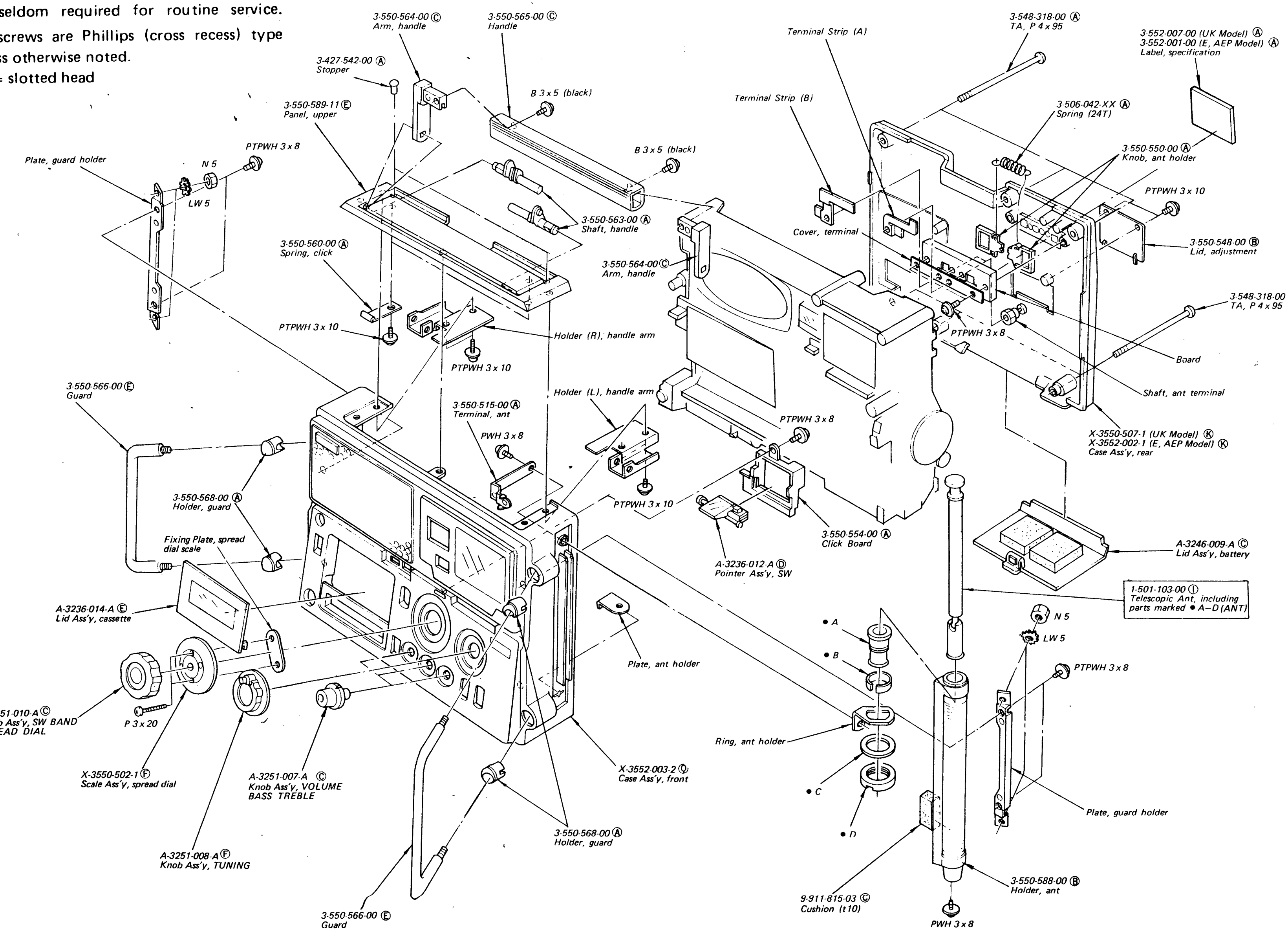
IC1: CX075B



5-1.

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.


A
B
C
D
E
1
2
3
3-550-564-00 Ⓒ
Arm, handle
3-550-565-00 Ⓒ
Handle
3-427-542-00 Ⓐ
Stopper
B 3 x 5 (black)
3-550-589-11 Ⓔ
Panel, upper
PTPWH 3 x 8
Plate, guard holder
N 5
LW 5
B 3 x 5 (black)
3-550-563-00 Ⓐ
Shaft, handle
3-550-560-00 Ⓐ
Spring, click
3-550-564-00 Ⓒ
Arm, handle
PTPWH 3 x 10
Holder (R), handle arm
PTPWH 3 x 10
3-550-566-00 Ⓔ
Guard
3-550-515-00 Ⓐ
Terminal, ant
PWH 3 x 8
Holder (L), handle arm
3-550-568-00 Ⓐ
Holder, guard
Fixing Plate, spread dial scale
A-3236-014-A Ⓔ
Lid Ass'y, cassette
A-3251-010-A Ⓒ
Knob Ass'y, SW BAND SPREAD DIAL
P 3 x 20
X-3550-502-1 Ⓕ
Scale Ass'y, spread dial
A-3251-007-A Ⓒ
Knob Ass'y, VOLUME BASS TREBLE
A-3251-008-A Ⓕ
Knob Ass'y, TUNING
3-550-566-00 Ⓔ
Guard
3-550-568-00 Ⓐ
Holder, guard
X-3552-003-2 Ⓠ
Case Ass'y, front
Plate, ant holder
PTPWH 3 x 10
A-3236-012-A Ⓓ
Pointer Ass'y, SW
3-550-554-00 Ⓐ
Click Board
PTPWH 3 x 8
Terminal Strip (A)
Terminal Strip (B)
Cover, terminal
3-548-318-00 Ⓐ
TA, P 4 x 95
3-506-042-XX Ⓐ
Spring (24T)
3-552-007-00 (UK Model) Ⓐ
3-552-001-00 (E, AEP Model) Ⓐ
Label, specification
3-550-550-00 Ⓐ
Knob, ant holder
PTPWH 3 x 10
3-550-548-00 Ⓑ
Lid, adjustment
3-548-318-00 Ⓐ
TA, P 4 x 95
PTPWH 3 x 8
Board
Shaft, ant terminal
X-3550-507-1 (UK Model) Ⓚ
X-3552-002-1 (E, AEP Model) Ⓚ
Case Ass'y, rear
A-3246-009-A Ⓒ
Lid Ass'y, battery
1-501-103-00 Ⓘ
Telescopic Ant, including parts marked ● A–D (ANT)
● A
● B
● C
● D
Ring, ant holder
N 5
LW 5
PTPWH 3 x 8
Plate, guard holder
3-550-588-00 Ⓑ
Holder, ant
9-911-815-03 Ⓒ
Cushion (t10)
PWH 3 x 8

5-2.

Note:

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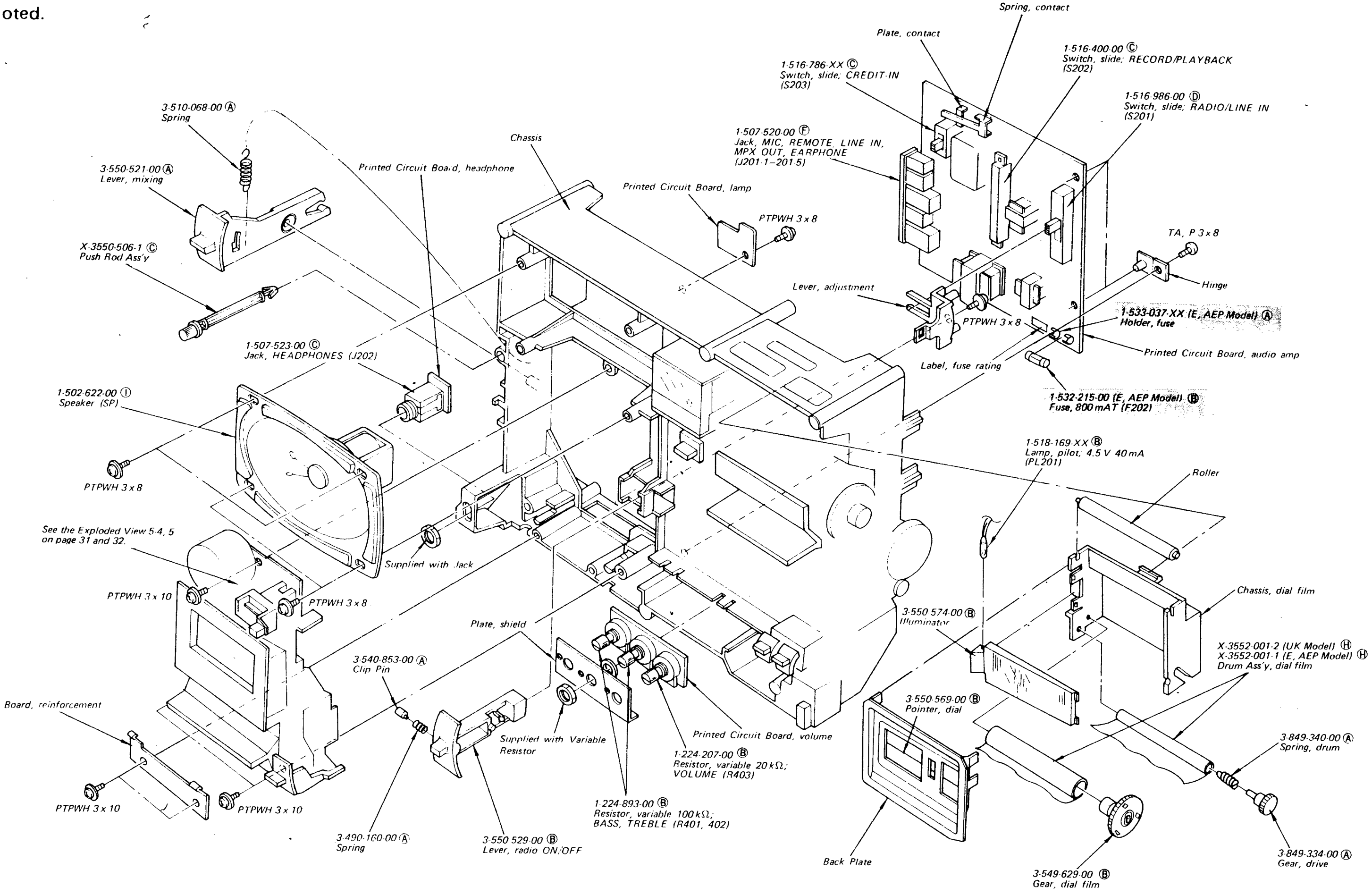
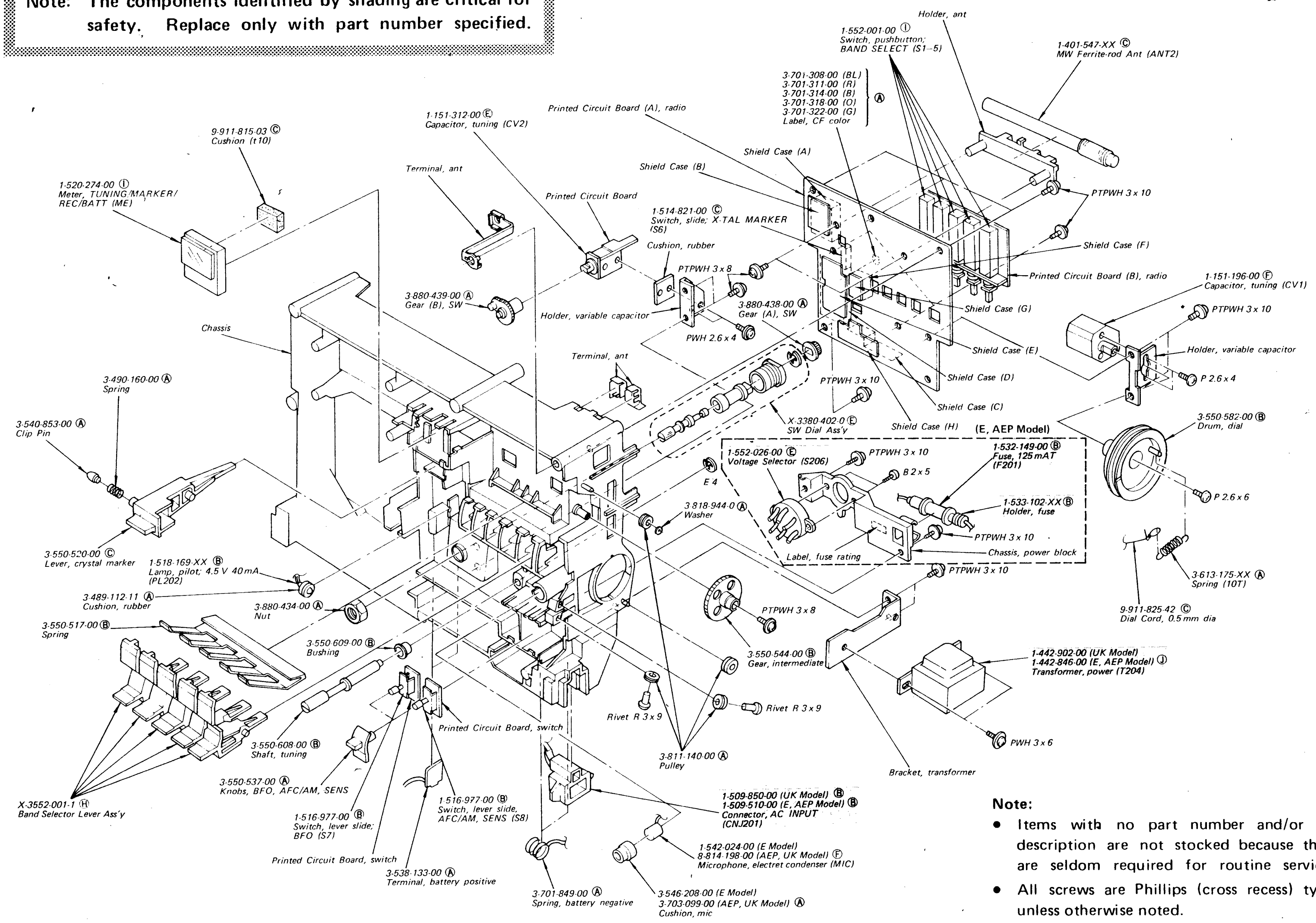

A
B
C
D
E
1
2
3
3-510-068-00 Ⓐ
Spring
3-550-521-00 Ⓐ
Lever, mixing
X-3550-506-1 Ⓒ
Push Rod Ass'y
1-507-523-00 Ⓒ
Jack, HEADPHONES (J202)
1-502-622-00 Ⓘ
Speaker (SP)
PTPWH 3 x 8
See the Exploded View 5-4, 5
on page 31 and 32.
PTPWH 3 x 10
PTPWH 3 x 8
Board, reinforcement
PTPWH 3 x 10
PTPWH 3 x 10
3-490-160-00 Ⓐ
Spring
3-540-853-00 Ⓐ
Clip Pin
3-550-529-00 Ⓑ
Lever, radio ON/OFF
Supplied with Variable
Resistor
Plate, shield
Supplied with Jack
Chassis
Printed Circuit Board, headphone
Printed Circuit Board, lamp
PTPWH 3 x 8
1-507-520-00 Ⓕ
Jack, MIC, REMOTE LINE IN,
MPX OUT, EARPHONE
(J201-1–201-5)
1-516-786-XX Ⓒ
Switch, slide; CREDIT-IN
(S203)
Plate, contact
Spring, contact
1-516-400-00 Ⓒ
Switch, slide; RECORD/PLAYBACK
(S202)
1-516-986-00 Ⓓ
Switch, slide; RADIO/LINE IN
(S201)
TA, P 3 x 8
Hinge
Lever, adjustment
PTPWH 3 x 8
1-533-037-XX (E, AEP Model) Ⓐ
Holder, fuse
Printed Circuit Board, audio amp
Label, fuse rating
1-532-215-00 (E, AEP Model) Ⓑ
Fuse, 800 mAT (F202)
1-518-169-XX Ⓑ
Lamp, pilot; 4.5 V 40 mA
(PL201)
Roller
Chassis, dial film
3-550-574-00 Ⓑ
Illuminator
X-3552-001-2 (UK Model) Ⓗ
X-3552-001-1 (E, AEP Model) Ⓗ
Drum Ass'y, dial film
3-550-569-00 Ⓑ
Pointer, dial
3-849-340-00 Ⓐ
Spring, drum
3-849-334-00 Ⓐ
Gear, drive
3-549-629-00 Ⓑ
Gear, dial film
Back Plate
Printed Circuit Board, volume
1-224-207-00 Ⓑ
Resistor, variable 20 kΩ;
VOLUME (R403)
1-224-893-00 Ⓑ
Resistor, variable 100 kΩ;
BASS, TREBLE (R401, 402)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

5-3.

Note: The components identified by shading are critical for safety. Replace only with part number specified.


A
B
C
D
E
1
2
3
Holder, ant
1-552-001-00 Ⓘ
Switch, pushbutton;
BAND SELECT (S1–5)
1-401-547-XX Ⓒ
MW Ferrite-rod Ant (ANT2)
3-701-308-00 (BL)
3-701-311-00 (R)
3-701-314-00 (B)
3-701-318-00 (O)
3-701-322-00 (G)
Label, CF color
Ⓐ
Printed Circuit Board (A), radio
1-151-312-00 Ⓔ
Capacitor, tuning (CV2)
9-911-815-03 Ⓒ
Cushion (t10)
Shield Case (A)
Shield Case (B)
Terminal, ant
Printed Circuit Board
1-520-274-00 Ⓘ
Meter, TUNING/MARKER/
REC/BATT (ME)
1-514-821-00 Ⓒ
Switch, slide; X-TAL MARKER
(S6)
Cushion, rubber
PTPWH 3 x 8
PTPWH 3 x 10
Shield Case (F)
Printed Circuit Board (B), radio
1-151-196-00 Ⓕ
Capacitor, tuning (CV1)
PTPWH 3 x 10
3-880-439-00 Ⓐ
Gear (B), SW
Holder, variable capacitor
3-880-438-00 Ⓐ
Gear (A), SW
Shield Case (G)
Holder, variable capacitor
P 2.6 x 4
Chassis
PWH 2.6 x 4
Shield Case (E)
Terminal, ant
Shield Case (D)
PTPWH 3 x 10
Shield Case (C)
3-490-160-00 Ⓐ
Spring
3-550-582-00 Ⓑ
Drum, dial
X-3380-402-0 Ⓔ
SW Dial Ass'y
Shield Case (H)
(E, AEP Model)
3-540-853-00 Ⓐ
Clip Pin
1-552-026-00 Ⓔ
Voltage Selector (S206)
PTPWH 3 x 10
1-532-149-00 Ⓑ
Fuse, 125 mAT
(F201)
B 2 x 5
E 4
P 2.6 x 6
1-533-102-XX Ⓑ
Holder, fuse
3-818-944-0 Ⓐ
Washer
PTPWH 3 x 10
Label, fuse rating
Chassis, power block
3-550-520-00 Ⓒ
Lever, crystal marker
1-518-169-XX Ⓑ
Lamp, pilot; 4.5 V 40 mA
(PL202)
PTPWH 3 x 10
3-613-175-XX Ⓐ
Spring (10T)
3-489-112-11 Ⓐ
Cushion, rubber
3-880-434-00 Ⓐ
Nut
PTPWH 3 x 8
9-911-825-42 Ⓒ
Dial Cord, 0.5 mm dia
3-550-517-00 Ⓑ
Spring
3-550-609-00 Ⓑ
Bushing
3-550-544-00 Ⓑ
Gear, intermediate
1-442-902-00 (UK Model)
1-442-846-00 (E, AEP Model) Ⓙ
Transformer, power (T204)
Printed Circuit Board, switch
Rivet R 3 x 9
Rivet R 3 x 9
PWH 3 x 6
3-550-608-00 Ⓑ
Shaft, tuning
3-811-140-00 Ⓐ
Pulley
Bracket, transformer
3-550-537-00 Ⓐ
Knobs, BFO, AFC/AM, SENS
X-3552-001-1 Ⓗ
Band Selector Lever Ass'y
1-516-977-00 Ⓑ
Switch, lever slide,
AFC/AM, SENS (S8)
1-516-977-00 Ⓑ
Switch, lever slide;
BFO (S7)
1-509-850-00 (UK Model) Ⓑ
1-509-510-00 (E, AEP Model) Ⓑ
Connector, AC INPUT
(CNJ201)
Printed Circuit Board, switch
3-538-133-00 Ⓐ
Terminal, battery positive
1-542-024-00 (E Model)
8-814-198-00 (AEP, UK Model) Ⓕ
Microphone, electret condenser (MIC)
3-701-849-00 Ⓐ
Spring, battery negative
3-546-208-00 (E Model)
3-703-099-00 (AEP, UK Model) Ⓐ
Cushion, mic

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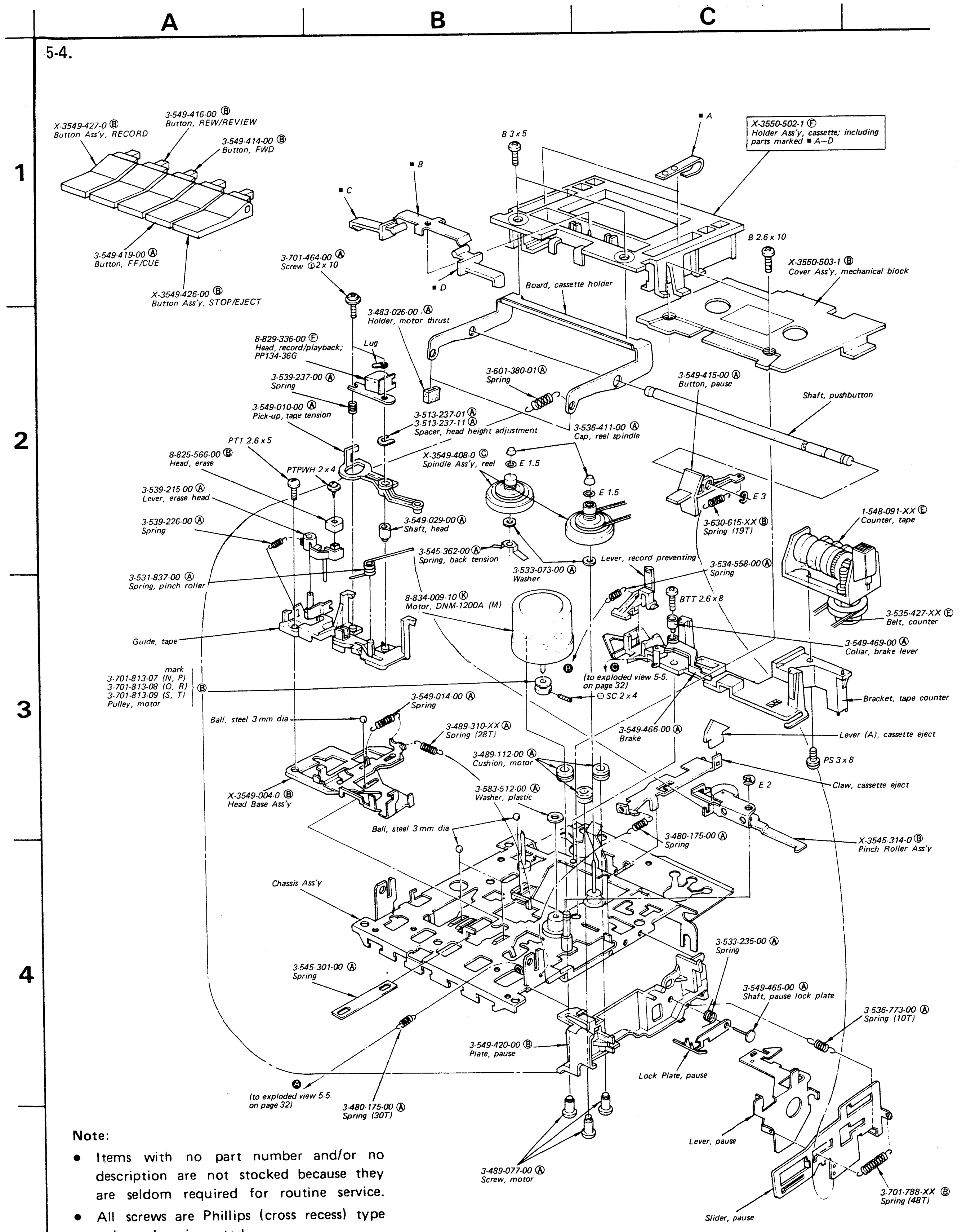
5-4.


A
B
C
1
2
3
4
5
X-3549-427-0 Ⓑ
Button Ass'y, RECORD
3-549-416-00 Ⓑ
Button, REW/REVIEW
3-549-414-00 Ⓑ
Button, FWD
3-549-419-00 Ⓐ
Button, FF/CUE
X-3549-426-00 Ⓑ
Button Ass'y, STOP/EJECT
■ B
■ C
■ D
■ A
B 3 x 5
X-3550-502-1 Ⓕ
Holder Ass'y, cassette; including parts marked ■ A–D
B 2.6 x 10
X-3550-503-1 Ⓑ
Cover Ass'y, mechanical block
3-701-464-00 Ⓐ
Screw ⊕2 x 10
Board, cassette holder
3-483-026-00 Ⓐ
Holder, motor thrust
8-829-336-00 Ⓕ
Head, record/playback; PP134-36G
Lug
3-539-237-00 Ⓐ
Spring
3-549-010-00 Ⓐ
Pick-up, tape tension
3-601-380-01 Ⓐ
Spring
3-549-415-00 Ⓐ
Button, pause
Shaft, pushbutton
3-513-237-01 Ⓐ
3-513-237-11 Ⓐ
Spacer, head height adjustment
3-536-411-00 Ⓐ
Cap, reel spindle
PTT 2.6 x 5
8-825-566-00 Ⓑ
Head, erase
PTPWH 2 x 4
X-3549-408-0 Ⓒ
Spindle Ass'y, reel
E 1.5
E 1.5
E 3
3-539-215-00 Ⓐ
Lever, erase head
3-549-029-00 Ⓐ
Shaft, head
3-630-615-XX Ⓑ
Spring (19T)
1-548-091-XX Ⓔ
Counter, tape
3-539-226-00 Ⓐ
Spring
3-545-362-00 Ⓐ
Spring, back tension
3-533-073-00 Ⓐ
Washer
Lever, record preventing
3-534-558-00 Ⓐ
Spring
3-531-837-00 Ⓐ
Spring, pinch roller
8-834-009-10 Ⓚ
Motor, DNM-1200A (M)
BTT 2.6 x 8
3-535-427-XX Ⓔ
Belt, counter
Guide, tape
3-549-469-00 Ⓐ
Collar, brake lever
mark
3-701-813-07 (N, P)
3-701-813-08 (Q, R)
3-701-813-09 (S, T)
Pulley, motor
Ⓑ
B
C
(to exploded view 5-5. on page 32)
⊖ SC 2 x 4
Bracket, tape counter
3-549-014-00 Ⓐ
Spring
Ball, steel 3 mm dia
3-489-310-XX Ⓐ
Spring (28T)
3-549-466-00 Ⓐ
Brake
Lever (A), cassette eject
3-489-112-00 Ⓐ
Cushion, motor
PS 3 x 8
3-583-512-00 Ⓐ
Washer, plastic
E 2
Claw, cassette eject
X-3549-004-0 Ⓑ
Head Base Ass'y
Ball, steel 3 mm dia
3-480-175-00 Ⓐ
Spring
X-3545-314-0 Ⓑ
Pinch Roller Ass'y
Chassis Ass'y
3-533-235-00 Ⓐ
Spring
3-549-465-00 Ⓐ
Shaft, pause lock plate
3-545-301-00 Ⓐ
Spring
3-536-773-00 Ⓐ
Spring (10T)
3-549-420-00 Ⓑ
Plate, pause
Lock Plate, pause
A
(to exploded view 5-5. on page 32)
3-480-175-00 Ⓐ
Spring (30T)
Lever, pause
3-489-077-00 Ⓐ
Screw, motor
3-701-788-XX Ⓑ
Spring (48T)
Slider, pause

Note:

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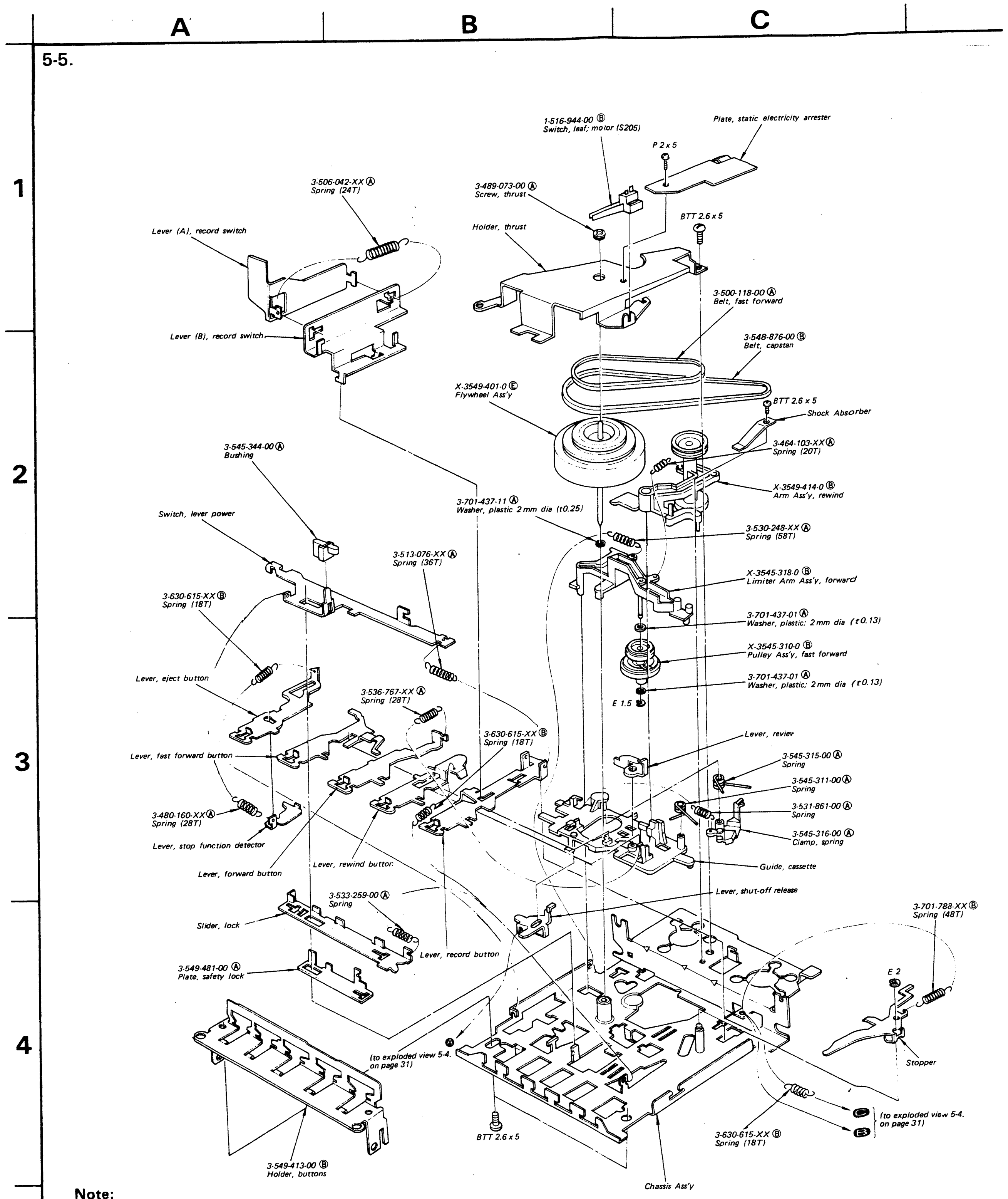
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

5-5.


A
B
C
1
2
3
4
5
1-516-944-00 Ⓑ
Switch, leaf; motor (S205)
Plate, static electricity arrester
P 2 x 5
3-506-042-XX Ⓐ
Spring (24T)
3-489-073-00 Ⓐ
Screw, thrust
BTT 2.6 x 5
Lever (A), record switch
Holder, thrust
3-500-118-00 Ⓐ
Belt, fast forward
Lever (B), record switch
3-548-876-00 Ⓑ
Belt, capstan
X-3549-401-0 Ⓔ
Flywheel Ass'y
BTT 2.6 x 5
Shock Absorber
3-464-103-XX Ⓐ
Spring (20T)
3-545-344-00 Ⓐ
Bushing
X-3549-414-0 Ⓑ
Arm Ass'y, rewind
3-701-437-11 Ⓐ
Washer, plastic 2 mm dia (t0.25)
Switch, lever power
3-530-248-XX Ⓐ
Spring (58T)
3-513-076-XX Ⓐ
Spring (36T)
X-3545-318-0 Ⓑ
Limiter Arm Ass'y, forward
3-630-615-XX Ⓑ
Spring (18T)
3-701-437-01 Ⓐ
Washer, plastic; 2 mm dia (t0.13)
X-3545-310-0 Ⓑ
Pulley Ass'y, fast forward
3-701-437-01 Ⓐ
Washer, plastic; 2 mm dia (t0.13)
Lever, eject button
3-536-767-XX Ⓐ
Spring (28T)
E 1.5
Lever, reviev
3-630-615-XX Ⓑ
Spring (18T)
Lever, fast forward button
3-545-315-00 Ⓐ
Spring
3-545-311-00 Ⓐ
Spring
3-531-861-00 Ⓐ
Spring
3-480-160-XX Ⓐ
Spring (28T)
3-545-316-00 Ⓐ
Clamp, spring
Lever, stop function detector
Lever, forward button
Lever, rewind button
Guide, cassette
Lever, shut-off release
3-533-259-00 Ⓐ
Spring
3-701-788-XX Ⓑ
Spring (48T)
Slider, lock
Lever, record button
3-549-481-00 Ⓐ
Plate, safety lock
E 2
A
(to exploded view 5-4. on page 31)
Stopper
C
B
(to exploded view 5-4. on page 31)
BTT 2.6 x 5
3-630-615-XX Ⓑ
Spring (18T)
3-549-413-00 Ⓑ
Holder, buttons
Chassis Ass'y

Note:

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- (□□T) shows the number of coils in spring.
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

SECTION 6
ELECTRICAL PARTS LIST

SEMICONDUCTORS

Transistors

Ref. No.	Part No.	Description
⇒ Q1		Ⓒ 2SK42-1
⇒ Q2		Ⓒ 2SC1129
Q3		Ⓑ 2SC930
⇒ Q4–8		Ⓑ 2SC710-4
⇒ Q9		Ⓑ 2SC710-3
⇒ Q10–12		Ⓑ 2SC1364-7
⇒ Q13		Ⓑ 2SC710-4
⇒ Q14,15		Ⓒ 2SC1129
⇒ Q16		Ⓑ 2SC1126-D
⇒ Q17–20		Ⓑ 2SC710-3
⇒ Q21-25		Ⓑ 2SC1364-7
⇒ Q26		Ⓑ 2SA678-7
⇒ Q27–29		Ⓑ 2SC1364-7
⇒ Q201		Ⓑ 2SC632A
⇒ Q202–204		Ⓑ 2SC1364-7
⇒ Q205		Ⓑ 2SC1364-7-1
⇒ Q206–210		Ⓑ 2SC1364-7
⇒ Q211,212		Ⓑ 2SC1474-3
⇒ Q213,214		Ⓑ 2SC1364-7
⇒ Q215		Ⓒ 2SA684-R

IC

Ref. No.	Part No.	Description
⇒ IC1		Ⓓ CX075B

Diodes

Ref. No.	Part No.	Description
⇒ D1		Ⓑ 2SC710-3
⇒ D2–5		Ⓑ 1S1555
⇒ D6,7		Ⓑ 1T261
D8		Ⓑ 1S1555
⇒ D9,10		Ⓑ 1T22A
D11,12		Ⓑ 1T261
⇒ D13,14		Ⓑ 1T22A
D15,16		Ⓑ 1S2222
⇒ D17		Ⓑ 1S1555
⇒ D201		Ⓑ 1S1555
⇒ D202		Ⓑ 1T22A
D203		Ⓒ SIRB10
Th1,201	1-800-198-XX	Ⓐ Thermistor S-1K

COILS

All coils are microinductors unless otherwise noted.

Ref. No.	Part No.	Description
L1	1-401-526-00	Ⓐ FM Ant
L3	1-405-699-00	Ⓑ FM Osc
L4	1-407-181-XX	Ⓐ 1.8μH
L5	1-407-175-XX	Ⓐ 330μH
L6	1-405-705-00	Ⓑ FM Osc
L7	1-407-163-XX	Ⓐ 33μH
L8	1-407-178-XX	Ⓐ 1μH
L9	1-407-185-XX	Ⓐ 3.9μH
L10	1-407-169-XX	Ⓐ 100μH
L11	1-407-182-XX	Ⓐ 2.2μH
L12	1-407-157-XX	Ⓐ 10μH
L13	1-407-169-XX	Ⓐ 100μH
L14–16	1-407-661-XX	Ⓐ 470μH
L17,18	1-407-157-XX	Ⓐ 10μH
L19	1-407-184-XX	Ⓐ 3.3μH
L20	1-407-189-XX	Ⓐ 8.2μH
L21	1-417-014-31	Ⓑ SW1 Mix
L22	1-407-157-XX	Ⓐ 10μH
L23	1-407-169-XX	Ⓐ 100μH
L24	1-407-661-XX	Ⓐ 470μH
L26,27	1-407-157-XX	Ⓐ 10μH
L28	1-407-169-XX	Ⓐ 100μH
L29	1-407-163-XX	Ⓐ 33μH
L30	1-407-185-XX	Ⓐ 3.9μH
L201	1-407-200-XX	Ⓑ 3.3 mH
L202,203	1-407-484-00	Ⓑ 3.3μH

TRANSFORMERS

Ref. No.	Part No.	Description
T1	1-403-872-00	Ⓑ FM IFT
T2	1-403-953-00	Ⓑ FM Discriminator, primary

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description
T3	1-403-959-00	Ⓑ FM Discriminator, secondary
T4	1-403-801-00	Ⓑ AM Detector
T5	1-405-713-00	Ⓑ 2nd Osc
T6	1-405-714-00	Ⓑ 455 kHz Osc
T7	1-401-644-00	Ⓑ SW3 Ant
T8	1-401-675-00	Ⓑ SW2 Ant
T9	1-401-695-00	Ⓑ SW1 Ant
T10	1-404-021-00	Ⓑ SW IFT
T11	1-405-520-00	Ⓑ MW Osc
T12	1-405-711-00	Ⓑ SW3 Osc
T13	1-405-742-00	Ⓑ SW2 Osc
T14	1-405-756-00	Ⓑ SW1 Osc
T201	1-423-049-XX	Ⓓ Input
T202	1-423-218-00	Ⓒ Input
T203	1-427-403-00	Ⓒ Output
T204	1-442-846-00	Ⓙ Power (E, AEP Model)
T204	1-442-902-00	Ⓘ Power (UK Model)
CF1 – 3	1-527-265-00	Ⓔ Filter, ceramic 10.7 MHz
CFA1	1-403-972-00	Ⓔ AM IFT 455 kHz (E, AEP Model)
CFA1	1-404-005-00	Ⓔ AM IFT 468 kHz (UK Model)

CAPACITORS

All capacitors are in μF and ceramic unless otherwise noted.
50WV or less are not indicated except for electrolytics. pF = μμF, elect = electrolytic

Ref. No.	Part No.	Description		
C1	1-102-947-11	Ⓐ 10p		
C2	1-102-941-11	Ⓐ 4p		
C3	1-102-939-11	Ⓐ 2p		
C4	1-102-109-11	Ⓐ 180p		
C5	1-102-947-11	Ⓐ 10p		
C6	1-102-940-11	Ⓐ 3p		
C7	1-102-108-11	Ⓑ 150p		
C8,9	1-102-923-11	Ⓐ 0.01		
C10	1-102-102-11	Ⓐ 0.0047		
C11	1-102-510-11	Ⓐ 12p		
C12	1-102-865-11	Ⓐ 8p		
C14	1-101-973-11	Ⓐ 20p		
C15	1-101-576-11	Ⓐ 1.5p		
C16	1-102-504-11	Ⓐ 4p		
C17	1-127-019-11	Ⓐ 0.1	16V	solid aluminum
C18	1-101-923-11	Ⓐ 0.01		
C19	1-121-413-11	Ⓐ 100	6.3V	elect
C20–24	1-101-923-11	Ⓐ 0.01		
C25	1-102-121-11	Ⓐ 0.0022		
C26	1-102-963-11	Ⓐ 33		
C27	1-102-121-11	Ⓐ 0.0022		
C28	1-101-923-11	Ⓐ 0.01		
C29	1-102-965-11	Ⓐ 39p		
C30	1-101-923-11	Ⓐ 0.01		
C31	1-101-924-11	Ⓐ 0.022		
C32,33	1-101-923-11	Ⓐ 0.01		
C34	1-121-424-11	Ⓑ 470	6.3V	elect
C35	1-102-973-11	Ⓐ 100p		
C36,37	1-101-923-11	Ⓐ 0.01		
C38	1-121-651-11	Ⓐ 10	16V	elect
C39,40	1-101-923-11	Ⓐ 0.01		
C41,42	1-121-651-11	Ⓐ 10	16V	elect
C43,44	1-102-978-11	Ⓐ 220p		
C45	1-102-973-11	Ⓐ 100p		
C46	1-101-923-11	Ⓐ 0.01		
C47	1-121-391-11	Ⓐ 1	50V	elect
C48,49	1-101-924-11	Ⓐ 0.022		
C50–52	1-101-923-11	Ⓐ 0.01		
C53	1-102-973-11	Ⓐ 100		
C54	1-121-352-11	Ⓐ 47	10V	elect
C55	1-101-923-11	Ⓐ 0.01		
C56	1-102-973-11	Ⓐ 100p		
C57	1-101-455-11	Ⓐ 0.001		
C58	1-161-025-11	Ⓑ 0.1		(boundary layer)
C59	1-121-391-11	Ⓐ 1	50V	elect
C60	1-102-972-11	Ⓐ 91p		
C61	1-107-264-11	Ⓑ 200p		silvered mica
C62	1-102-699-11	Ⓐ 75p		
C63	1-101-923-11	Ⓐ 0.01		
C64	1-102-949-11	Ⓐ 12p		
C65	1-102-947-11	Ⓐ 10p		
C66–70	1-101-923-11	Ⓐ 0.01		
C71	1-127-019-11	Ⓑ 0.1	16V	solid aluminum
C72	1-102-947-11	Ⓐ 10p		
C73	1-102-705-11	Ⓐ 180p		
C74,75	1-101-923-11	Ⓐ 0.01		

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description		
C76	1-102-951-11	Ⓐ15p		
C77	1-101-923-11	Ⓐ0.01		
C78	1-127-019-11	Ⓑ0.1	16V	solid aluminum
C79	1-161-017-11	Ⓐ0.022		(boundary layer)
C80	1-161-013-11	Ⓐ0.01		(boundary layer)
C81	1-121-450-11	Ⓐ2.2	50V	elect
C82	1-161-025-11	Ⓑ0.1		(boundary layer)
C83	1-102-942-11	Ⓐ5p		
C84	1-107-093-11	Ⓐ 220		silvered mica
C87	1-161-010-11	Ⓐ 0.0056		(boundary layer)
C88	1-102-960-11	Ⓐ24p		
C89	1-102-958-11	Ⓐ20p		
C90	1-101-924-11	Ⓐ0.022		
C91–93	1-101-923-11	Ⓐ0.01		
C96	1-101-923-11	Ⓐ0.01		
C98,99	1-101-923-11	Ⓐ0.01		
C100	1-107-267-11	Ⓐ56p		silvered mica
C101	1-102-755-11	Ⓐ43p		
C102	1-107-263-11	Ⓑ150p		silvered mica
C103	1-102-756-11	Ⓐ47p		
C104	1-107-260-11	Ⓑ 82p		silvered mica
C105	1-101-998-11	Ⓐ6p		
C106	1-107-265-11	Ⓐ 360p		silvered mica
C108	1-102-286-11	Ⓐ10p		
C109	1-102-953-11	Ⓐ18p		
C110,111	1-102-947-11	Ⓐ10p		
C112,113	1-101-923-11	Ⓐ0.01		
C114	1-121-352-11	Ⓐ47	10V	elect
C115	1-102-965-11	Ⓐ39p		
C116,117	1-102-114-11	Ⓐ470p		
C118,119	1-101-923-11	Ⓐ0.01		
C120	1-102-942-11	Ⓐ5p		
C122	1-121-352-11	Ⓐ47	10V	elect
C123	1-121-395-11	Ⓐ4.7	25V	elect
C124	1-107-260-11	Ⓑ82p		silvered mica
C125,126	1-102-942-11	Ⓐ5p		
C127	1-102-965-11	Ⓐ39p		
C129	1-121-726-11	Ⓐ0.47	50V	elect
C130,131	1-127-019-11	Ⓑ0.1	16V	solid aluminum
C132,133	1-121-352-11	Ⓐ47	10V	elect
C134	1-101-924-11	Ⓐ0.022		
C135	1-101-455-11	Ⓐ0.001		
C136,137	1-101-924-11	Ⓐ0.022		
C138,139	1-102-973-11	Ⓐ100p		
C140	1-101-923-11	Ⓐ0.01		
C141–143	1-102-973-11	Ⓐ100p		
C201	1-108-830-12	Ⓐ 0.0027		mylar
C202	1-127-019-11	Ⓑ 0.1	16V	solid aluminum
C203	1-121-726-11	Ⓐ 0.47	50V	elect
C204	1-102-975-11	Ⓐ 100p		
C205	1-108-831-12	Ⓐ0.0033		mylar
C206	1-102-832-11	Ⓐ330p		
C207	1-121-352-11	Ⓐ47	10V	elect
C208,209	1-121-726-11	Ⓐ0.47	50V	elect
C210	1-102-967-11	Ⓐ22p		
C211	1-102-832-11	Ⓐ330		
C212	1-121-402-11	Ⓐ33	10V	elect
C213	1-121-414-11	Ⓐ100	10V	elect
C214	1-121-419-11	Ⓑ220	6.3V	elect
C215	1-102-975-11	Ⓐ100p		
C216	1-121-651-11	Ⓐ10	16V	elect
C217	1-108-832-12	Ⓐ0.0039		mylar
C218	1-108-843-12	Ⓐ0.033		mylar
C219	1-102-975-11	Ⓐ100p		
C220	1-108-835-12	Ⓐ0.0068		mylar
C221	1-108-832-12	Ⓐ0.0039		mylar
C222	1-108-830-12	Ⓐ0.0027		mylar
C223	1-121-392-11	Ⓐ 3.3	25V	elect
C224	1-102-832-11	Ⓐ 330p		
C225	1-121-651-11	Ⓐ 10	16V	elect
C226	1-102-832-11	Ⓐ330p		
C227	1-102-975-11	Ⓐ 100p		
C228	1-121-651-11	Ⓐ 10	16V	elect
C229	1-121-736-11	Ⓑ 1000	10V	elect
C230	1-121-726-11	Ⓐ0.47	50V	elect
C231	1-102-967-11	Ⓐ 22p		
C332	1-102-832-11	Ⓐ330p		
C233,234	1-121-726-11	Ⓐ 0.47	50V	elect
C235	1-102-975-11	Ⓐ 100p		
C236	1-102-832-11	Ⓐ 330p		
C237	1-101-918-11	Ⓐ 0.001		
C238	1-121-402-11	Ⓐ 33	10V	elect

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description		
C239	1-121-352-11	Ⓐ 47	10V	elect
C240	1-121-419-11	Ⓑ 220	6.3V	elect
C241	1-121-425-11	Ⓑ 470	10V	elect
C242	1-101-922-11	Ⓐ 0.0047		
C243	1-101-918-11	Ⓐ 0.001		
C244	1-121-424-11	Ⓑ 470	6.3V	elect
C245	1-121-414-11	Ⓐ 100	10V	elect
C246	1-121-402-11	Ⓐ 33	10V	elect
C247	1-121-425-11	Ⓑ 470	10V	elect
C248	1-121-651-11	Ⓐ 10	16V	elect
C249	1-101-923-11	Ⓐ 0.01		
C250	1-121-659-11	Ⓑ 2200	10V	elect
C251,252	1-101-918-11	Ⓐ 0.001		
C253	1-101-923-11	Ⓐ 0.01		
C254	1-101-918-11	Ⓐ 0.001		
C255	1-101-923-11 1-108-847-61	Ⓐ 0.01 (E Model) Ⓐ 0.068	 50V	 mylar (UK, AEP Model)
C401	1-108-842-12	Ⓐ0.027		mylar
C402	1-108-851-12	Ⓑ0.15		mylar
C403	1-108-833-12	Ⓐ0.0047		mylar
C404	1-108-845-12	Ⓐ0.047		
CT1,2	1-141-138-XX	ⒷTrimmer		
CT3	1-141-171-00	ⒷTrimmer		
CT4	1-141-186-00	ⒷTrimmer		
CT5	1-141-138-XX	ⒷTrimmer		
CT6–9	1-141-171-00	ⒷTrimmer		
CT10	1-141-138-XX	ⒷTrimmer		
CV1	1-151-196-00	ⒻTuning		
CV2	1-151-312-00	ⒺTuning		

RESISTORS

Ref. No.	Part No.	Description
R87	1-224-647-XX	Ⓑ47k, adjustable
R257	1-224-644-XX	Ⓑ4.7k, adjustable
R401,402	1-224-893-00	Ⓑ100k, variable; BASS, TREBLE
R403	1-224-207-00	Ⓑ20k, variable; VOLUME

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

SWITCHES

Ref. No.	Part No.	Description
S1–5	1-552-001-00	Ⓘ Pushbutton, BAND SELECT
S6	1-514-821-00	Ⓒ Slide, X-TAL MARKER
S7,8	1-516-977-00	Ⓑ Lever Slide, BFO, AFC/AM SENS
S201	1-516-986-00	Ⓓ Slide, RADIO/LINE IN
S202	1-516-400-00	Ⓒ Slide, record/playback
S203	1-516-786-XX	Ⓒ Slide, CREDIT/IN
S205	1-516-944-00	Ⓑ Leaf, motor
S206	1-552-026-00	Ⓔ Voltage Selector (E, AEP Model)

JACKS

Ref. No.	Part No.	Description
J201	1-507-520-00	Ⓕ MIC, REMOTE, LINE IN, MPX OUT, EARPHONE
J202	1-507-523-00	Ⓒ HEADPHONES
CNJ201	1-509-510-00	Ⓒ Connector, AC INPUT (E, AEP Model)
CNJ201	1-509-850-00	Ⓑ Connector, AC INPUT (UK Model)

MISCELLANEOUS

Ref. No.	Part No.	Description
ANT1	1-501-103-00	Ⓘ Telescopic Ant
ANT2	1-401-547-XX	Ⓒ MW Ferrite-rod Ant
CP201	1-464-007-00	Ⓔ Unit, bias osc
EH	8-825-566-00	Ⓑ Head, erase; EBF5-02B
F201	1-532-149-00	Ⓑ Fuse, 125 mAT (E, AEP Model)
F202	1-532-215-00	Ⓑ Fuse, 800 mAT (E, AEP Model)
M	8-834-009-10	Ⓚ Motor, DNM-1200A
ME	1-520-274-00	Ⓘ Meter, TUNING/MARKER/REC/BATT
MIC	1-542-024-00	Ⓔ Microphone, electret condenser (E Model)
	8-814-198-00	Ⓕ Microphone, electret condenser (AEP, UK Model)
PL201,202	1-518-169-XX	Ⓑ Lamp, pilot; 4.5V 40mA
RPH	8-829-336-00	Ⓕ Head, record/playback; PP134-36G
SP	1-502-622-00	Ⓘ Speaker

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Ref. No.	*Part No.*	*Description*
X1	1-527-269-51	ⓀCrystal
	1-533-037-XX	Ⓐ Holder, fuse (E, AEP Model)
	1-533-102-XX	Ⓑ Holder, fuse (E, AEP Model)

ACCESSORIES & PACKING MATERIALS

Part No.	*Description*	*Part No.*	*Description*
X-3701-105-0	ⒶTips Ass'y, cleaning	3-550-601-00	ⒸCushion, side; left
		3-550-602-00	ⒸCushion, side; right
1-504-059-00	ⒸEarphone, ME-20H	3-552-005-00	Ⓔ Carton (E-1, AEP, UK Model)
1-506-309-00	ⒷPlug, short (SP-100)		
1-526-565-00	Ⓑ Adaptor, ac parallel blade plug (E-2 Model)	3-552-006-00	ⒺCarton (E-2 Model)
1-534-840-XX	ⒺCord, power; w/euro-plug (E-1, AEP Model)	3-701-632-00	ⒶBag, plastic
1-551-218-00	Ⓔ Cord, power (UK Model)	3-703-099-00	ⒶCushion, microphone (UK, AEP Model)
1-551-235-00	ⒺCord, power; w/parallel-blade plug (E-2 Model)	3-770-237-11	ⒻManual, instruction (AEP Model)
		3-770-237-41	ⒻManual, instruction (UK Model)
3-546-208-00	ⒶCushion, microphone (E Model)	3-770-237-51	ⒻManual, instruction (E Model)
3-548-395-00	Ⓑ Bag, plastic; set	3-794-070-51	ⒸManual, instruction; arabic
		8-893-511-00	ⒻTape, demonstraction; CD-805

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Note: The components identified by shading are critical for safety. Replace only with part number specified.

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SW/FM/MW CASSETTE-CORDER

CF-950S

E Model
AEP Model
UK Model

CORRECTION

Correct the service manual as shown below.

☛ : CORRECTED PORTION

No. 1
August, 1977

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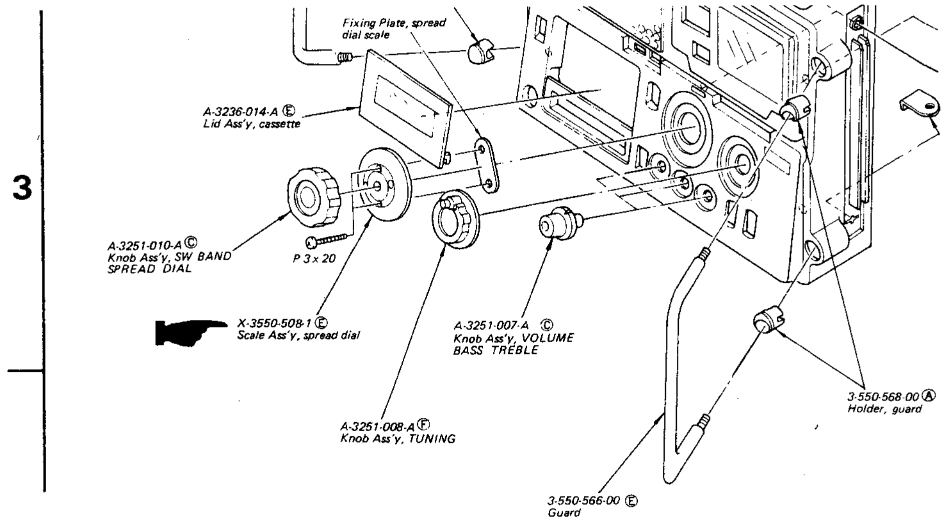
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Fixing Plate, spread dial scale
A-3236-014-A Ⓔ Lid Ass'y, cassette
A-3251-010-A Ⓒ Knob Ass'y, SW BAND SPREAD DIAL
P 3 x 20
X-3550-508-1 Ⓔ Scale Ass'y, spread dial
A-3251-007-A Ⓒ Knob Ass'y, VOLUME BASS TREBLE
A-3251-008-A Ⓕ Knob Ass'y, TUNING
3-550-568-00 Ⓐ Holder, guard
3-550-566-00 Ⓔ Guard

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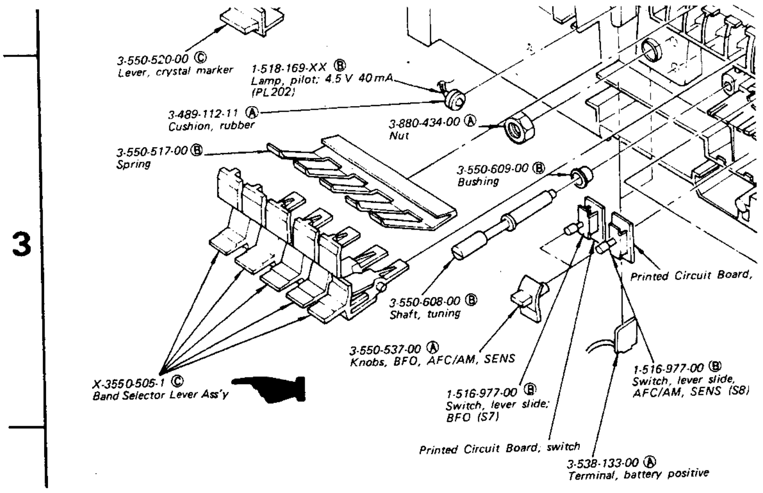
3
3-550-520-00 Ⓒ Lever, crystal marker
1-518-169-XX Ⓑ Lamp, pilot; 4.5 V 40 mA (PL202)
3-489-112-11 Ⓐ Cushion, rubber
3-880-434-00 Ⓐ Nut
3-550-517-00 Ⓑ Spring
3-550-609-00 Ⓑ Bushing
Printed Circuit Board,
3-550-608-00 Ⓑ Shaft, tuning
3-550-537-00 Ⓐ Knobs, BFO, AFC/AM, SENS
X-3550-505-1 Ⓒ Band Selector Lever Ass'y
1-516-977-00 Ⓑ Switch, lever slide, AFC/AM, SENS (S8)
1-516-977-00 Ⓑ Switch, lever slide; BFO (S7)
Printed Circuit Board, switch
3-538-133-00 Ⓐ Terminal, battery positive

SONY®
SERVICE MANUAL

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CF-950S

SW/FM/MW
CASSETTE-CORDER

E Model
AEP Model
UK Model

CORRECTION

Correct the service manual as shown below.

☛ : CORRECTED PORTION

No. 2
August, 1980

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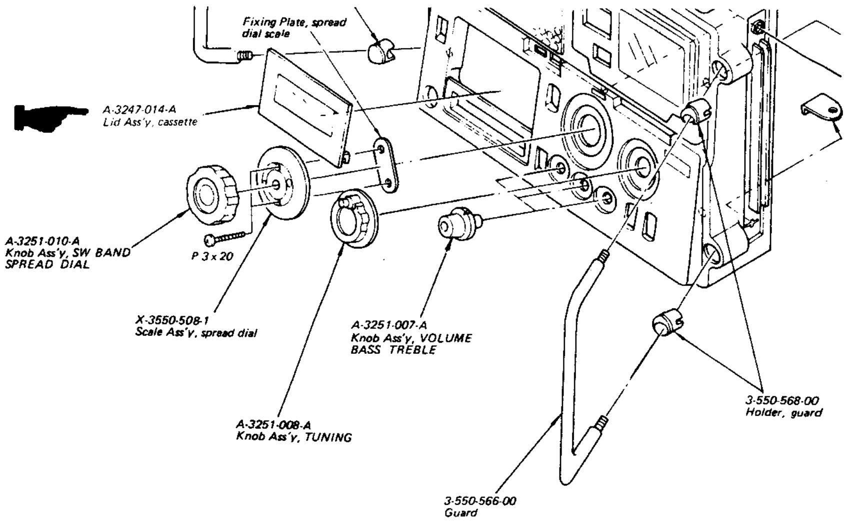
3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Lid Ass'y, cassette
A-3251-010-A
Knob Ass'y, SW BAND SPREAD DIAL
P 3 x 20
X-3550-508-1
Scale Ass'y, spread dial
A-3251-007-A
Knob Ass'y, VOLUME BASS TREBLE
A-3251-008-A
Knob Ass'y, TUNING
3-550-568-00
Holder, guard
3-550-566-00
Guard

SONY®
SERVICE MANUAL

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